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UNIVERSITY ELEMENTARY SCHOOL

THE STORY OF ANCIENT EGYPT

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PREFACE

WE are justly proud of the many achievements of our own age, but we should never forget that our civilization grew from what people did long ago. Among the most interesting of these early people were the ancient Egyptians. They invented paper and one of the earliest forms of writing; some of the most remarkable buildings ever erected were built by them, the ruins of which still stand as eloquent if rather mysterious witnesses to their skill and way of life which was so different from our own. Their civilization lasted longer than any other the world has known, and they have left behind them plenty of material to help ARCHAEOLOGISTS reconstruct their story.

Places like the British Museum in London, the Metropolitan Museum in New York, and museums in many other cities and towns are full of examples of the Egyptians' skill and craftsmanship in sculpture, painting, jewellery and simple objects of everyday life, and it is perhaps these intimate, personal things that bring us most closely in touch with them and make us realize they were ordinary human beings like ourselves. Although it has not been possible in this short book to give more than a brief sketch of so large a subject, we hope that after reading it you may feel tempted to visit your nearest museum and see the Egyptian collection not just as dull objects in glass cases, but things which speak of the life of a wonderful people who lived many thousands of years ago.

The story told in this book could not have been written if many gifted and patient scholars had not devoted their time and effort to studying the relics left by the ancient Egyptians, and to interpreting their language and writing. To some of these present day scholars and, in particular, to our friends and colleagues in the Griffith Institute in the Ashmolean Museum at Oxford, we offer our sincere thanks for the help and encouragement they have so generously given us while writing this little book. We have also appreciated having free access to the Library in the Griffith Institute which has been of the greatest value.

We have enjoyed writing this story, and we hope that you will enjoy reading it—enough, perhaps, to read other books about ancient Egypt in which the story is told in greater detail.

B.M.S.

P.B.L.

Oxford, June 1960.



ROSETTA

DAMIETTA

LOWER EGYPT

The Egyptian Empire
extended as far
north as the Euphrates



GIZA

HELIOPOLIS



FAYYUM

MEMPHIS
(SAKKARA)

MIDDLE EGYPT



AMARNA

The Egyptians lived
by cultivating their
fertile Nile Valley



UPPER EGYPT



DEIR EL BAHRI



KARNAK
THEBES
LUXOR



EDFU

The Temple of Horus

1st Cataract

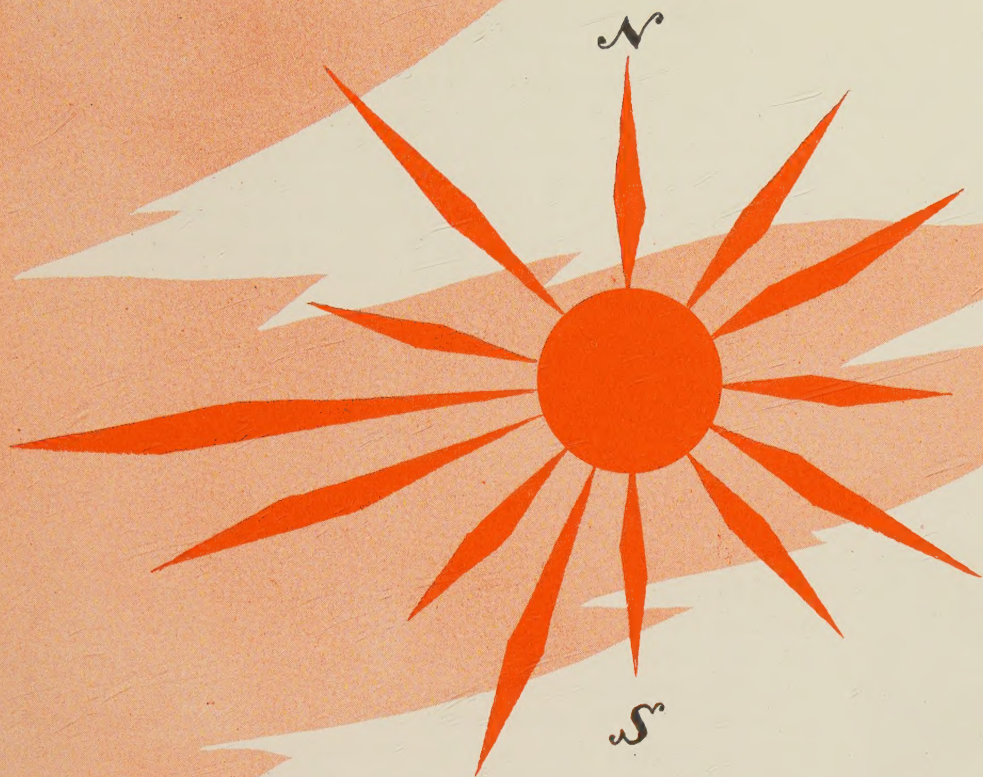


ABU SIMBEL

2nd Cataract

N U B I A

R E D
S E A



EGYPT IS THE NILE

—and the Nile is Egypt runs an old saying which is as true to-day as it was 6,000 or even 10,000 years ago, for if there were no River Nile there would be no story to tell and the whole of the world's history might have been different. It was in the river valleys that the earliest civilizations grew up, in China, India, MESOPOTAMIA and Egypt. Separated by a thousand miles of desert the civilizations of Egypt and Mesopotamia were growing up at the same time and, as nomad shepherds and traders passed between the two lands, the Egyptians learned a great deal from the people of Mesopotamia. In their turn other peoples learned from Egypt and the arts of civilization spread around the Mediterranean Sea—the sea which was once regarded as the centre of the world.

The Egyptian civilization is one of the oldest in the world, but the land of Egypt has not changed very much since the days of the PYRAMIDS. The Egyptian farmer still depends upon the river to make his corn grow as his ancestors did thousands of years ago. Without the river he would starve and the land of Egypt would be a barren desert scorched by a pitiless sun.

Long before history began, when men lived in caves or in trees and hunted with stones and sticks, there was a time when the Sahara desert was covered with trees, and animals roamed through the green lands of North Africa. But the world's climate changed; the ice cap which had lain so long over northern Europe retreated, the grass and the trees moved northwards and the sun seemed to grow hotter. Less often came the winds laden with rain to the lands of the Sahara, and so gradually desert took the place of the trees. To-day the desert, which is in some places 1,000 miles in width, stretches from the west coast of Africa eastwards far into Asia.

It would be all desert, unbroken for thousands of miles, were it not for heavy rain falling

far away in the south. From Lake Victoria, fed by the rains of Central Africa, flows a river 4,000 miles long, which must cross 1,000 miles of desert before it reaches the Mediterranean Sea. The water of this river on its own would be enough to make a valley where some plants could grow and a few people could live, but alone it could not have made the soil of Egypt rich, for Egypt receives more than water from the Nile. During the early summer rain falls upon the mountains of Abyssinia, and streams rush down the mountain sides, washing away the rich soil and carrying it with them into a **TRIBUTARY** stream of the Nile, which from its dark colour, is known as the Blue Nile. Throughout July and August the swollen waters

flow down towards the sea and cover the land on both sides of the river. During the last few months of the year, as the floods drain away, they deposit their loads of fertile silt upon the fields.

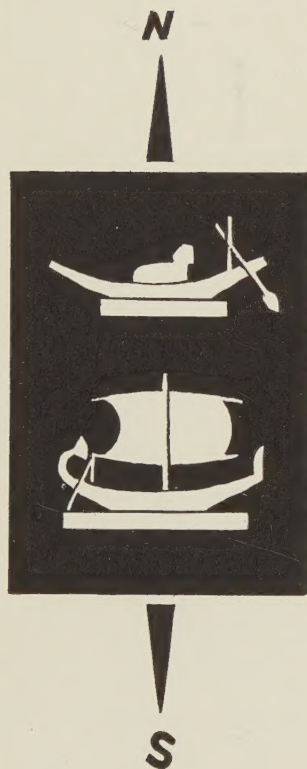
The arrival of the Nile flood, which is very regular, was the first calendar date which the ancient Egyptians used to look forward to, for the **ASTRONOMERS** had noticed that the waters rose soon after a certain star appeared in the sky at dawn.

The story of Egypt really begins when men first noticed that seeds of corn would grow upon the rich, moist river soil. They learned to farm, to control the waters and to turn the desert into cornfields. To-day, thanks to careful **IRRIGATION**, the fertile land bordering the Nile is in places ten miles in width. Beyond the fields are the cliffs—limestone, sandstone or granite—from which the Egyptians obtained their building stone. Behind the cliffs and away to the west and east stretches the desert, its rocks and sand dunes swept by parching winds and scorched by the sun. No wonder it is said that 'Egypt is the Nile', for the river provides greenness and life in an otherwise barren world.

Although the modern state of Egypt has an area equal to four times that of Great Britain, in this book we will be concerned almost entirely with the valley of the Nile and its **DELTA**, for it is there that most of the people have lived and still live to-day.

Most of us like studying our atlases and we have grown used to looking at maps which show north at the top of the page and south at the bottom, but we should remember that in geography there is no top nor bottom, and that as we travel towards the north we may be going downhill or downstream. So it is with Egypt. The Nile runs pretty well from south to north, so that Lower Egypt is at the top and Upper Egypt at the bottom of most of the maps we know. The Egyptians were just as convinced as we are that the usual way of looking at things was the right way. Their words for 'north' and 'south' were 'downstream' and 'upstream', and when their soldiers went to **MESOPOTAMIA** they were amazed to find that the river there flowed 'backwards'—in other words, from north to south!

Upper Egypt is a 500 mile length of river, stretching from the **FIRST CATARACT** at Aswan to the modern capital city of Cairo. Just below Cairo, and whilst it is still 100 miles from the sea, the river splits into two channels which flow into the Mediterranean at



The hieroglyphic signs for going downstream (a boat without sails) and sailing upstream (a boat with sails).

Rosetta and Damietta. Between these main branches of the river is a network of smaller channels forming the fan-shaped DELTA region of small islands and sandbanks. The Delta was built up through the ages as the river slowed down on meeting the sea, and was made to drop whatever it still carried of the soil stolen from Abyssinia. This district where land and water seem to mix is Lower Egypt.

The soil of the Delta region is damp, for once, at the beginning of Egypt's history, it was all marshland. To-day, however, because generations of patient men have dug drains and defended their fields against the river, most of the land is fit for farms and houses.

The ARCHAEOLOGIST obtains his knowledge from the objects brought to light by his spade. Not very much is known about the ancient people of Lower Egypt, for in the damp soil of the Delta most of the remains have perished.

In the dry sand which fringes the farmlands of the Nile Valley were buried the statues, tombs and buildings of people of long ago. The Egyptians loved colour, and the work of their artists, the paintings on tomb and temple walls and the painted statues of their kings, has been guarded by the soft dry sand which drifted up against them. The dryness of the air and sand has prevented the paint from flaking or the colours from running, and we can enjoy the pictures almost as much as did those who first saw them.

The Egyptians were very obliging people—or so the archaeologist believes—for much of our knowledge of ancient Egypt is provided by the Egyptians themselves. Many of the most interesting objects in our museums come from the tombs in which the relations of a dead man placed gifts of food and drink, household utensils, clothes and jewellery. The contents of a king's tomb would be of great value and a great temptation to robbers. Too often they succeeded in finding the cunningly concealed entrances to the royal tombs and removed from them all that was of value.

One of the most exciting discoveries ever made by an archaeologist happened in 1922 when the tomb of the boy king, Tutankhamun, was found exactly as it had been left by those who placed him in it. The eighteen-year-old king had lain undisturbed in the midst of his possessions; and furniture and treasure were seen by men for the first time in thousands of years. Little triangular loaves of bread, 3,500 years old, and jars of beer have been found. One archaeologist tasted the dead king's beer, but did not like it!

The water of the Nile made the civilization, but it was the dryness of the desert which preserved it for us to see and understand.



A typical Egyptian landscape.

EARLY TIMES

THE further back in time we travel the more difficult it is to be sure of what happened. Those who study the past have two ways of finding out: they can either read what the people of old wrote, or they can examine the ruins of their buildings, fragments of pottery, bones and bits of metal. Of course, if there is nothing written it is not possible to find out the names of any of the kings or leaders or to know much about what people felt or thought. The time before people knew how to write is known as *pre-historic*; history can only be said to begin when the first writing appeared, when names of kings, codes of law, or letters are found scratched on stones or pieces of dried clay. We do know a little about the prehistory of Egypt, however. We can go back to about 12,000 B.C.—or maybe 10,000—the archaeologist can never be positive when men so long ago first did certain things. All that can be said is that by about 10,000 years ago people were living in the Nile Valley and learning to grow corn and keep animals for food. They had ceased to be wanderers, and lived in settled communities. So the centuries passed away, and for six or seven thousand years the people of the Nile Valley slowly learned the arts of civilization and became more highly organized. They built dwellings of mud or reeds, and lived in villages under the leadership of a chief, worshipping gods who, they believed, lived in the nearby trees, in the bodies of certain animals, or in the river which flowed close by.

Life became more complicated and work had to be organized. Those who had special skill worked at the job which they did best instead of doing everything from ploughing to tool-making for themselves. Food was grown and provided by the farmers in exchange for vessels made by the potters; the carpenters and metal-workers provided tools and weapons, and so on—each man busy with his own special craft. This way of living gave men more free time for thinking about other things than simply the needs of keeping alive, and the wise men of the village could develop the arts of writing, reading, and studying the stars, or working out ideas about those still puzzling subjects of life and death. It meant too that as many groups of people came together, communities became bigger and people had to live peacefully with one another. Laws were needed, and someone had to see that they were kept. Someone had to give the lead when large scale works of IRRIGATION were carried out. The chosen man was usually stronger and more intelligent than his fellows, sometimes he was the priest and ASTRONOMER too.

Gradually all the smaller communities became welded together, either because they agreed to join with each other or because the weaker ones were conquered by the strong, until there were two main kingdoms which covered the areas we know as Upper Egypt and Lower Egypt.

Along the banks of the upper Nile grew a kind of rush plant which the Egyptians used for thatching their huts and made into bundles which they bound together to make their first boats—a method still used by the Peruvian and Bolivian Indians living on the shores of the high South American lake Titicaca. To the people of Upper Egypt these rushes were so important that they chose a clump of them as their national emblem, just as the people of England chose the rose, the Irish the shamrock or the Canadians the maple leaf. The plant which the marsh-dwellers of Lower Egypt chose was the PAPYRUS—a type of reed which has played a very important part in man's history. There are no papyrus plants to be found now in the Nile Delta but they grew plentifully for the ancient Egyptians who used bundles of them coated with clay as pillars to support a roof of thick reed matting to protect them from the burning sun. More bundles were smeared with pitch to make boats. They even



Two Nile gods tie the plants of Upper and Lower Egypt round the hieroglyphic sign meaning 'union'—a conventional Egyptian design for the uniting of the Two Lands.

used the soft parts of the plant as food. Later, papyrus was used to make the earliest type of paper—but that is another story.

In the earliest carvings and pictures which archaeologists have found, the king of Upper Egypt is shown wearing a white crown and near him is a rush plant. The king of Lower Egypt appears with a red crown and a clump of papyrus. There were two kingdoms, two kings, two emblems. So when carvings and pictures were found which showed one king wearing a double crown of red and white, and the rush and papyrus plants intertwined, it showed pretty clearly that the two kingdoms must at some time have been joined together. Archaeologists are still arguing about the date when this happened, but most of them believe that it was about 3,000 B.C.

With the uniting of the two kingdoms about 5,000 years ago, Egyptian history really begins, for from about this time there are inscriptions which give the names of the kings and some of the chief events. We can go back 3,000 years in Egyptian history and be fairly certain of what happened. The Egyptians were joined in one kingdom whilst the people of Britain lived in many small tribes under local chiefs. The Egyptians and the people of Mesopotamia had learned to do fine work in metal and to write, whilst in northern Europe the most up-to-date tools were made out of quarried flints, and men were only learning to be farmers. It is amazing that we know so much about the beginnings of Egyptian history for 3,000 B.C. is twice as far back from our own time as are the days when the Greek cities were at their greatest. Some of the first Egyptians to write their own history were born longer after the joining of the two kingdoms than we were after them. It is no wonder that there should be a little uncertainty as to when things happened; the amazing thing is that we know so much.

KINGS AND DATES

A dishonest dealer in curios and antiques offered a collector a Roman coin bearing the date B.C. *LIV*. As you will realize, the collector at once spotted that the dealer was a crook, and we would be just as suspicious of an archaeologist who announced that he had found a pillar inscribed 5,000 B.C. The Egyptians were clever but they did not have second sight!

Those who want to explain when something happened can only do so if they have a date to begin counting from. We count our years from the birth of Jesus and all understand perfectly what is meant by the letters and figures A.D. 1960. The Romans counted their years *Ab Urbe Condita* (from the founding of the city) or else they wrote 'When So-and-so was consul'. As we know that Rome was founded in 753 B.C., and have lists which show when various consuls ruled, it is fairly easy to place the dates in Roman history.

Fortunately for us, the Egyptians, ever since early times, kept lists of their kings which showed how long they reigned. Fragments of these lists have been found, and the names on them checked against monuments which were raised to glorify their kings. Some events are known to have occurred during a certain king's reign and then it becomes possible to count forwards and backwards to find the years when other kings reigned.

Just as we have war memorials in churches and public places, or have the foundation stones of buildings inscribed with names and dates, so the Egyptians liked to record outstanding events upon the walls of their temples and tombs and upon large slabs of stone which are called STELAE. A STELA might tell of some great battle, and give the name of the reigning king, or it might tell the story of a man's career.

The EGYPTOLOGIST has to be a detective. He has to collect scraps of information, compare them one with another and put them in the right order. But there may be gaps of a hundred years in the lists which he has collected and he still needs to know the answers to questions which only a complete history book could give.

The first history of Egypt was not written until 300 B.C. By this time the great days of Egypt were over, Alexander the Great had conquered the land and a line of Greek kings named Ptolemy ruled over it. At the command of Ptolemy I the Egyptian high-priest, Manetho, wrote a history of Egypt "from the beginning" which meant that he had to look back 3,000 years. He wrote in Greek and claimed to have based his work on the records of the Egyptian priests. His own writings perished along with much of the learning of the ancient world, but shortened versions in Greek and Latin survived. These have been found very useful although they contain mistakes which translators made as they turned the history from one language into another.



An Egyptian priest offering incense to a god—Manetho may have looked like this.



Photo: Mansell-Alinari.

Part of the Palermo Stone, one of the oldest historical documents in the world.

Manetho divided his lists of kings into families or groups called **DYNASTIES**. This word is useful to us in the same way as the expressions 'Tudor' or 'Hanoverian' are useful labels for periods in English history. We find it convenient to describe a ruff and velvet doublet as 'Tudor' dress rather than say it was worn by a man who lived between 1500 and 1600 A.D. The words 'Tudor', 'Stuart' and 'Hanover' are family names of kings and queens in England.

Altogether there were 30 dynasties of kings lasting from about 3,000 B.C. (when Upper and Lower Egypt were united) to 333 B.C. Since it is not possible to give accurate calendar dates and, even if the name of a reigning king were known it would have to be searched for in a long list, the best thing to do is to say that a building or a statue belongs to a certain dynasty. The time chart in this book gives, so far as we know them, the dates of these dynasties, the names of some of the chief rulers and some of the great events.

We have seen that the Egyptologists have had to fit bits of information together. To understand how difficult the task has been it is worth knowing about some of the finds which have helped to uncover the secrets of the past. The oldest list of kings was inscribed on a slab of hard black stone known as diorite. Now it is broken and what is left of the stone is kept in the Palermo museum in Sicily. When it was complete it gave a list of kings of Upper and Lower Egypt from before the First Dynasty to the middle of the Fifth Dynasty, a period of just over 500 years. The names of kings are not very interesting on their own but the *Palermo Stone* also tells of important events, of religious ceremonies and—what seems strange to us—the height each year of the Nile flood. We care very little how our rivers rise and fall but to the Egyptians the Nile was of interest to everybody for upon the height of one year's flood depended the following year's bread. A series of low Niles would have worried the Egyptians as much as the threat of an atomic war worries us to-day.

There are two other important lists of kings which were carved, one on the walls of a temple at Abydos in Upper Egypt and the other on the walls of a tomb at Sakkara in Lower Egypt.

Stone slabs are sometimes broken and walls fall down, but usually they last longer than books or papers. There are, however, many Egyptian documents or **PAPYRI** which have lasted through the centuries, and although they are torn and frayed the writing on them is still legible to those who can read the **HIERATIC** script. One of the most famous of the Egyptian papyri was found by an Italian in 1824 and is now kept in a museum in Turin. Once the Turin papyrus was put together it was found to contain the names of 80 to 90 kings. Apart from the history of Manetho, the Turin papyrus is the most complete list which has come to light.

Some events in Egyptian history can be given accurate dates because, although the Egyptians did not realize it, there were two calendars, the official calendar which they are

thought to have invented about 4241 B.C. and which had 365 days in every year, and the true sun calendar which has $365\frac{1}{4}$ days in every year. (We use the sun calendar but we add one day every four years rather than begin each year 6 hours later than the last.) Simple arithmetic will show that in 4 years the official Egyptian calendar would be 1 day out, 2 days out in 8 years and 365 days, or a whole year, out after 1,460 years had passed. Every 1,460 years the Egyptians' calendar would agree with the sun and their New Year's Day, the first of the month of THOTH, would fall as it should upon July 19th.



tela of Nebimose who is shown with his mother and wife who offers bread and beer. The prayer to the living is written below in hieroglyphs. (This tela is in the Ashmolean Museum, Oxford.)

The most important event in the Egyptian year was the flooding of the Nile. It was discovered that the floods came every year at about the same time—very soon after the ASTRONOMERS reported that a star named SOTHIS rose above the horizon exactly at dawn. The river gave names to their seasons too, for instead of spring, summer, autumn and winter, the Egyptians passed through the three seasons of “flood”, “time of sowing”, and “harvest”.

In the year A.D. 140 Sothis rose at dawn on the first day of Thoth and, for a change, the calendar was right! As we have seen this could not have happened for 1,460 years, so the time before must have been in 1320 B.C. and the time before that in 2780 B.C.

Suppose an archaeologist finds an inscription telling of King ‘XYZ’ which says that in the year he began his reign Sothis rose on the 4th day of Thoth. He knows from this that 16 years had passed since the calendars agreed. It could therefore be the year 1304 B.C.

or 2764 B.C. (We are dealing with dates B.C. so we count backwards as time passes.) King ‘XYZ’ could not have begun to reign in 2764 B.C. for the archaeologist knows he belongs to the Nineteenth Dynasty which came much later. The year when King ‘XYZ’s’ reign began must therefore be 1304 B.C. So the Egyptologist has to be good at arithmetic and know something of astronomy too.

Sometimes he may seek the help of another scientist who knows how to find the age of a piece of wood, bone or leather by measuring the amount of RADIO-ACTIVE CARBON it contains. The less there is the greater the age of the material, and a table of measurements

would enable the scientist to put the age of a wooden chair or leather sandal to within about 200 years.

We can sit comfortably at home and read the clear print of a book, written in a language which we understand, and at the same time learn about people of another land and in a long-past age who spoke in a way we could not hope to understand. To make this possible archaeologists have worked in blazing sun and choking sand; Egyptologists have bent over stone slabs and bits of torn papyrus. They have studied and copied signs and compared their notes with the discoveries of others. Their patient work has revealed a story of a wonderful people who had a history 3,000 years long. But not only do we have the dry bones of the story, we also know how the ancient Egyptians lived; what they ate, what they thought, what they taught their children and what they laughed at. They are more real to us than many who have lived much closer to our own times.



A coffin.

DEAD OR ALIVE?

A VERY young child found a dead bird in the garden. She knew that it would fly no more and that it ought to be buried, yet she felt that the bird should be happy. She gently covered it with earth, 'gave it some flowers and sang it a song'. The little girl could not imagine that the dead bird would not hear or see any more. Death was something she could not understand and she felt that pleasant things should go on being enjoyed.

We do not understand death either, and though most of us believe that there is a life after this one, we cannot imagine what it would be like; we do, however, feel that the things which we enjoy now will not matter to us after we are dead.

The Egyptians enjoyed their lives and they could not bear to look forward to a time when food or flowers or music would not matter any more. Naturally, people who had seen their friends die in battle or eaten by a wild animal could not pretend to themselves that everything was as it had been with a dead person. He spoke no more, and perhaps his body was damaged, yet they wanted to feel that something still lived. They said that a man's *KA* went on living and that it still needed caring for. We sometimes talk about a person's *soul* living for ever, and we think of something without colour or shape, something which cannot be seen or felt and which does not need any more the things which keep the body alive. The *ka* was the Egyptians' idea of a man's personality, and the part of him which lasted for ever, but they thought of it as something which did appreciate and need food, clothing, jewellery and weapons.

They felt that the *ka* still needed the body which it had been used to, and that if that body were destroyed the *ka* would die. To prevent this happening they learned to make MUMMIES which were enclosed in coffins usually made of wood, and sometimes fitting to the shape of the body. The *ka* was treated with the same respect as the living person. People were asked to remember the *ka*—not merely with their prayers—but in a more concrete way. This request was carved on every tombstone and addressed to the living, to family, friends and passers-by:

“O, all you who pass by this tomb, may you make an offering of bread and beer, oxen and geese, vases of ointment and clothing and incense, and all things good and pure on which a god lives, for the *ka* of So-and-So.”

Although there was little doubt that his devoted family and friends would keep the dead man supplied with provisions, for they knew that it was their duty to do so if they hoped to be treated in the same way when they died, no one could be sure that the supplies would be kept up years later by forgetful great-grandchildren. Rich people, therefore, took out a type of insurance policy and left a large portion of their wealth to the temple or cemetery priests who undertook to place food offerings in front of a life-sized *ka*-statue and to perform certain other funeral services from time to time. There soon grew up a respected body of priests, known as the *ka*-priests, who handed on their positions and monies from father to son.

In time the money provided would run out, and the food offerings would be left no longer. To guard against this danger there were painted all over the walls of the tomb pictures of food and drink and all other necessities of life, as well as scenes showing the man enjoying his family life and other activities such as hunting, feasting, and looking after his estates. They were very accurately done, for the *ka* could not be expected to eat corn that did not look like corn! If the tomb, the MUMMY, the dead man's name, and the pictures remained, all would be well, for greater than the fear of death was the fear of dying “a second time in the NECROPOLIS”; that was death indeed, for it closed finally the gate which led to the next world.

That is why, in some tombs, the names of the owners have been hacked out. The enemies of the dead man would seek to do this, for it was the cruellest vengeance which could be thought of. It is no wonder then that their tombs were built of stone, or hewn deep in the rocky cliffs of the desert, which were safer and more lasting than the houses they had lived in. So it is not the flimsy mud or plaster houses which the archaeologist finds, for these soon fell down, but the tombs which were built to last and which have taught us most of what we know about the way these people lived.

We sometimes say that something has ‘gone west’ and mean that it has disappeared. How we got this expression it would be hard to say but it may remind us of the disappearance every night of that most inspiring object, the sun. The Egyptians became worshippers of the sun (as many other people did) perhaps because the sun was the source of light and life as well as something rather frightening. The sun was regular and reliable; every day it rose in a blaze, never obscured by clouds as it sometimes is with us; every day it winged its burning way across the sky, and every evening it disappeared beneath the rim of the desert. It died every night and returned so wonderfully in the morning. The sun did what they wanted to do—it lived forever and showed that death was not the end. They began to think of their kings as sons of the sun-god for, like the sun, the all-powerful king dispensed life to his people. In time the king took the name of RĒ and added it to his own to show that the sun-god was his father.

Food and drink were placed before the ka-statue which came forth from the burial chamber to receive them.

When the king died people believed that he had gone to the west to join his father and to be reborn with him every morning. It seemed, then, a very sensible idea to bury the dead in the region of the setting sun, and for this reason most of the cemeteries are to be found in the western desert. Eventually everybody, king or commoner, rich or poor, were allowed to join Rē in his never-ending life; and all, when they died, were thought to have 'gone west'!

At first it was only the kings and nobles who were given elaborate and beautiful tombs but about 2000 B.C., after a time of revolution, all people began to claim that they should share these privileges. Then kings began to reward their faithful servants or courtiers with gifts of land for their tombs, sometimes with the tomb itself, or perhaps with furniture and carvings. These were great honours and were appreciated as much as knighthoods or medals are by people to-day. So grateful were those who were thus honoured by the king's gift that it became the custom to begin inscriptions in the tombs with the words *hotep-di-nesu*, which means "a gift which the king gives". Even when people came to build their own tombs for themselves the phrase was still used, for it had become the correct thing to do.

The Egyptians felt that what was even better than honour in this life was the guarantee of a safe and pleasant life in the world to come. We would not be very pleased to receive a grave or a tombstone as a reward for good work—we might feel that someone was trying to get rid of us. But then we feel that the good things of life are to be enjoyed now, and not by the *ka* in the future.



KINGS OF OLD

'How We Won the War: a history in pictures specially prepared, at his royal command, to celebrate the mighty victory of our King Narmer; tastefully produced on a slab of green slate by the King's own artists.' So might run an imaginary description of one of the oldest and most important examples of picture story which we know. It concerns the doings of the first person in history whose name we know—or think we know, for sometimes he is referred to as *Narmer* and at other times as *Menes*. He may have been called by both names, *Menes* as his personal name and *Narmer* as a religious title or **HORUS NAME**.

Narmer was the first king of the First Dynasty. As King of Upper Egypt he conquered the chiefs of Lower Egypt, and on the **PALETTE** which told of his victories his enemies are shown with their heads chopped off and placed neatly between their feet. The King is also shown in human form, wearing the red crown of Lower Egypt, in the form of a falcon called **HORUS** perched on six papyrus plants (the symbols of Lower Egypt) and again as a bull knocking down the enemies' walls whilst he pins one of the warriors to the ground with his horns. We are not meant to be in any doubt about the achievements of Narmer!

The story is told in pictures because at this time the Egyptians had not fully developed their **HIEROGLYPHIC** system of writing, though they had symbols for the most important things such as the king's name.

Having joined the two kingdoms into one it now fell to Narmer and to those who followed him to give the land a capital city. Narmer chose the site of the city of Memphis (near the modern village of *Sakkara*), but before the city could be built the course of the river had to be changed. This was done by damming it and leading the water through a new channel; quite a feat of engineering for 3,000 B.C.!

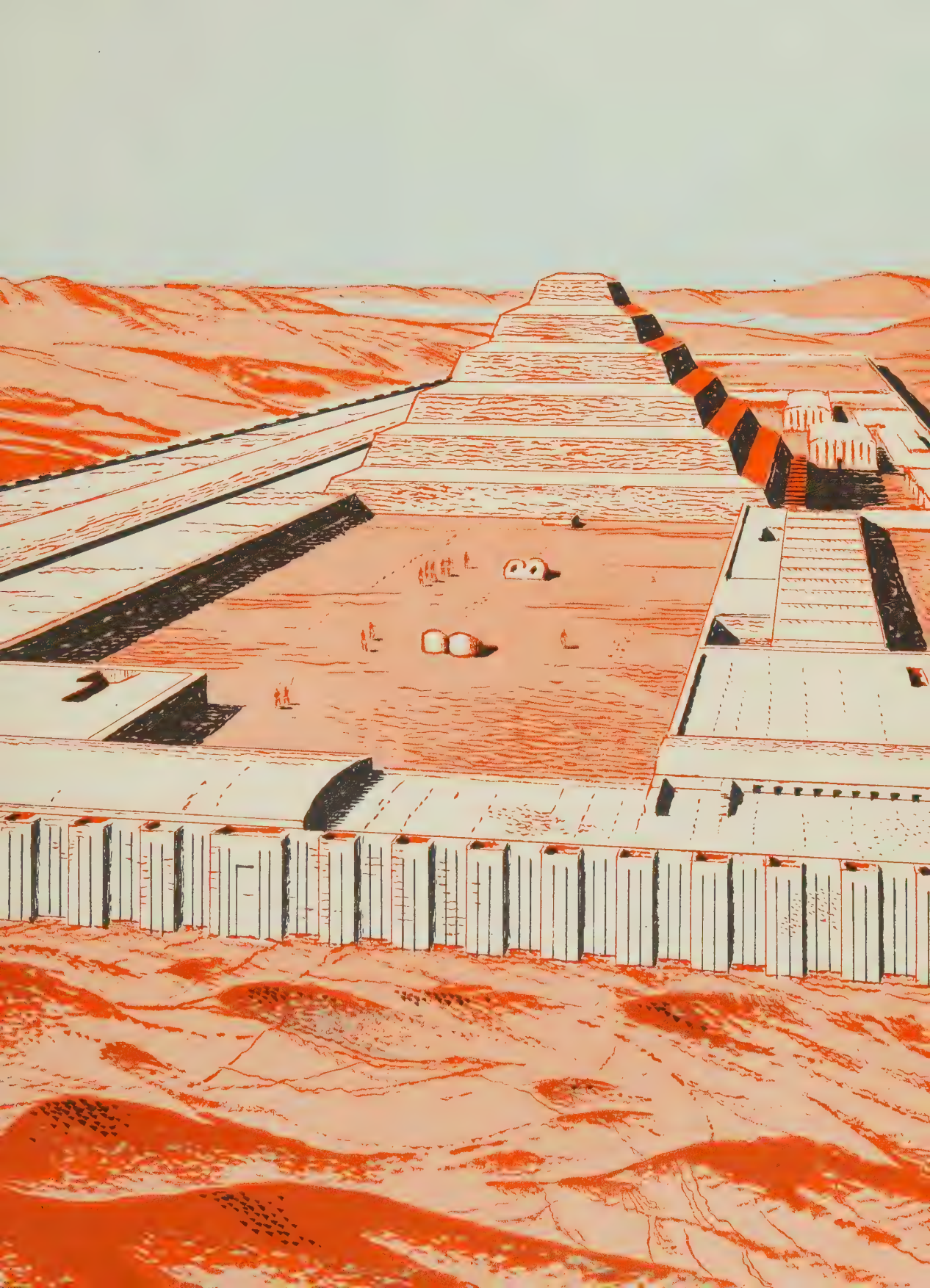
Although the Egyptians of the First Dynasty knew how to work in metal, Egypt was then, as it is to-day, badly off for supplies of both metal and wood so, as civilization grew, and needs of craftsmen and builders became greater, these materials had to be obtained either by conquest or by trade. Merchants went through the **FERTILE CRESCENT**, to the Lebanon and to the Sudan. As they travelled they met other people and learned fresh ideas which they brought back and spread amongst their own people.

It was during the Third Dynasty that some of these new ideas imported into Egypt led to the customs which we know so well—the customs of **MUMMIFICATION** and pyramid building.

The early tombs of kings and nobles were rectangular platforms with sloping sides built of sun-baked bricks coated with fine limestone. Archaeologists call them **MASTABAS** for they resemble the stone benches which are found outside Egyptian houses to-day upon which the Egyptians sit in the sun gossiping, smoking and drinking coffee and, as often as not, just sleeping.

Djoser, the first king of the Third Dynasty had big ideas about his burial place. He wanted it to be seen above all the other mastabas in the necropolis. The king called for his Prime Minister, who was also his chief architect and probably his doctor as well. This man was named Imhotep and he thought of a plan which satisfied his master's ambition and earned for him so great a reputation that many centuries later he was worshipped as a god. Imhotep built six mastabas, one on top of the other, each one smaller than the one below it so that the whole structure looked rather like a staircase leading to the sky. Indeed, he may have had the idea of a staircase at the back of his mind for would not the king wish to climb towards the sky to join the sun-god?

Djoser's Step Pyramid with its surrounding shrines is perhaps the oldest building in the world.



Around the *Step Pyramid* were stone chapels and shrines and a temple which was joined by a tunnel to the burial chamber deep in the pyramid's heart. Alongside the temple was a small room, completely enclosed, with only two holes at eye level looking into it. In the darkness of this SERDAB stood a life-size painted statue of Djoser, placed there so that the king could keep in touch with the world even after he had gone to join Rē in the next.

The *Step Pyramid* at Sakkara is, as far as we know, the oldest building in stone. But for those who study Egypt it is also important because of what came after. Although the king's family and private people continued to be buried in mastabas kings took to building for themselves PYRAMIDS which were built on the same principle as Imhotep's *Step Pyramid* and afterwards given their triangular shape by filling in the large steps with blocks to make an unbroken outline. A casing of dressed white limestone added afterwards gave the smooth perfection of the finished pyramid.

During the next Dynasty, the Fourth, about 100 years later, the great pyramids of Giza were begun. They still stand after 4,700 years and, of all the great buildings which make up the SEVEN WONDERS of the Ancient World, the Pyramids of Giza are the only ones which remain—yet they were relics of ancient times and objects of amazement to those who constructed the other six Wonders.



The Palette of Narmer who is shown wearing the White Crown of Upper Egypt, and about to club his conquered enemy. The bird on the papyrus plants represents the King leading the Lower Egyptians captive.

THE BUILDERS OF THE PYRAMIDS

FOR three months every year the Egyptian farmer could do no work for his land was covered by flood water from the river. He did not object to being idle, but whilst he sat resting in the shade the amount of corn in his store bins was growing less, and there was still a long time to wait for the next harvest. He had paid his tax of corn and dates to the king's men with some grumbling, but he realized that, at any rate, he stood a chance of getting some of it back if he cared to work. He was perhaps little better than a slave, one of about 100,000 who worked for Khufu through 20 flood seasons, but he was also a member of a highly organized state and had therefore to endure the hardships as well as receive the benefits of having someone to order his life for him.

At Giza, 7 miles from Cairo, are the great pyramids of the Kings of the Fourth Dynasty, Khufu, Khafre, and Menkaure, surrounded by many smaller pyramids and temples. They were all built upon the same pattern, having evolved in shape from the Step Pyramid of Djoser.

The first king of the Fourth Dynasty was Snefru who built two pyramids: one of them, at Meidum, was the first true pyramid, square in plan and with four faces in the shape of an ISOSCELES triangle. Snefru showed the way, but Khufu, who followed him, was responsible for the greatest pyramid which has ever been built; for although the Egyptians continued to lay their dead kings in pyramids for many more years, the pyramids became smaller and less imposing. To-day Khufu's pyramid is 450 feet in height, but when it was built some 4,700 years ago it rose 481 feet above the desert. It lost its pointed top and carefully dressed sides during its long life, for the smooth limestone casing which covered it was stripped off by builders who found it easier to rob a pyramid than to go to the quarries. Because the casing has been removed the pyramid is rugged in appearance and the blocks of which it is built lie in steps several feet high so that those who are agile can scramble to the top. When they get there they would be nearly 100 feet higher than the cross on the top of St Paul's Cathedral in London, or nearly half way up to the lantern on the top of New York's Empire State Building. The Great Pyramid covers $12\frac{1}{2}$ acres—approximately the area of 6 football pitches.

It is estimated that 2,300,000 blocks of stone, each weighing over two tons were used to build the 6,000,000 ton mass. These huge blocks were dragged on sledges or rollers over a road leading from the water's edge a quarter of a mile away.

During the twenty flood seasons which it took to build the pyramid the blocks of stone would have to be laid at the rate of two every minute. The road and the ramps of brick and sand, which were raised to the level of the pyramid as it grew, must have been very busy. Since the Egyptians had no trucks nor cranes, nor even pulleys, all the work would have to be done by the strength of human muscles aided by poles, rollers and ropes. Some men would be dragging the blocks on sledges, some would be pulling with ropes whilst others pushed. Another gang would be piling up the sand to make the ramp up which the stones would have to go. Once the blocks had been raised to the required level, more men armed with levers would place them accurately in position under the stern and watchful eye of the overseer. So accurately did the architects measure out the shape of the pyramid and so carefully were the stones placed, that, although each side is 775 feet long, they are equal to each other to within a few inches. The sides face exactly north, south, east and west, and the whole building stands square with the Nile which flows exactly northwards at this place.

In the northern face is the entrance to the passage which leads to an empty chamber 101

feet below the pyramid's base. This is not the tomb of Khufu for unlike earlier pyramids or mastabas, the king's burial chamber containing his SARCOPHAGUS was in the heart of the Great Pyramid, and can be reached by walking up a long sloping passage.

Almost all the pyramids of the OLD KINGDOM had two temples attached to them. The lower temple stood where the desert fringed the fields of the valley and may have been connected with the river by a canal. From this temple a sloping, stone-paved causeway, flanked by sculptured walls, led to another temple attached to the pyramid itself. Probably it was in this upper temple that the funeral ceremonies took place and offerings were made to the dead king.

On the walls of the burial chamber in the pyramid of Unas, a king of the Fifth Dynasty, were hieroglyphic inscriptions. His was the first pyramid to have on its walls these Pyramid Texts which were religious and magical spells and prayers designed to help the king on his journey through the underworld after death. The texts were written in a very old and difficult form of the language—in fact as time passed the Egyptians themselves could no longer read them and they forgot what they meant. This did not prevent people copying them and inscribing them on their coffins. Later on versions of these texts and spells were written on PAPYRUS, beautifully illustrated with coloured pictures, and placed in rolls in the tombs of wealthy people. These pictures, which were copied throughout hundreds of years, right up to the first century B.C., are probably the earliest book illustrations in the world and form part of THE BOOK OF THE DEAD.

The journey which men took when they died was full of dangers. Even the king, who was also a god, needed a pyramid to protect him and raise him up to his father the Sun. Lesser people, who could not look forward to such a glorious future, would try to protect themselves by reciting the correct spells from the book which was buried with them.

There is much that will always remain a mystery about the pyramids, and these strange silent monuments have so impressed people that they have made strange theories about them. Some believed that they must be the storehouses for grain which, the Bible story tells us, Joseph built. Other eccentric people have decided that they can foretell the future by doing sums with the measurements of the Great Pyramid! Close by Khafre's pyramid stands the Great SPHINX who looks as though he were a great deal wiser than all those who have written such nonsense about him. This well-known monument

The Great Sphinx and the Pyramids of Giza which are one of the Seven Wonders of the World.



is an outcrop of rock 240 feet long which reminded the builders of King Khafre's pyramid of a crouching lion. They took advantage of this happy likeness, for lions were supposed to act as guardians to sacred places. Instead of the head of a lion, however, they gave the Sphinx a head carved to resemble their king.

There are many other sphinxes in Egypt which stand in avenues, guarding like crouching lions the entrances to temples. Many are the strange stories which have grown up about the Great Sphinx of Giza: that it was the statue of a strange animal which used to roam the deserts, or that it was a creature possessed of all knowledge and wisdom. One story, told by the ancient Egyptians, tells of a prince who had been out hunting lions and lay down to rest in the shadow of the Sphinx. He fell asleep and dreamed that it spoke to him and promised that if he cleared away the sand from between the statue's paws he would become king. He did this small favour for the Sphinx and in time was rewarded with the throne. The strange monument fascinates visitors to Egypt, but its sculptors would be even more fascinated if they could see where miniatures of it are to be found to-day—as mascots on a famous make of English motor-car!





Harkhuf brings the pygmy to King Pepi II, who is wearing the Double Crown of the Two Lands.

A TIME OF REVOLUTION

SOME people are fascinated by the idea of breaking records; they like to hear of the fastest 'plane, the highest waterfall or the oldest person. Egyptian history can claim several records: the Egyptians made the largest stone buildings in the Pyramids, they made the first illustrated books, and so on. It was also an Egyptian King, Pepi II, of the Sixth Dynasty, who had the longest reign of any monarch in history. He came to the throne at the age of six and lived until his hundredth year, so reigning for 94 years. Soon after he became king an expedition was sent far south into Nubia (the Sudan) where the Egyptians traded and received the homage of tribal chiefs. The expedition was led by Harkhuf, an adventurous explorer of the age, who brought back to his king a ship laden with ivory and gold. But the young king was more interested in another gift—a captive from one of the pygmy tribes of Central Africa. The Egyptians appreciated pygmies and dwarfs much as kings of the Middle Ages in Europe enjoyed the antics of the court jester, and they must have been a rare sight so far from their homeland.

The young Pepi wrote a letter to Harkhuf and, ignoring all the other rich gifts, told him "Come northwards to the Court immediately—set aside all business—thou shalt bring this pygmy with thee which thou bringest living, prosperous and healthy. ... When he goes down with thee into the vessel ... appoint excellent people who shall sleep beside him in his tent, inspect ten times a night. My Majesty desires to see this pygmy more than the gifts of Sinai and Punt." Harkhuf was so proud of this letter that he had it engraved on the wall of his tomb at Aswan. It was not only to Nubia that the traders went. Ships sailed down the Red Sea to PUNT, miners went to SINAI, ships also went to Lebanon to fetch cedar trees, and to CRETE where another great civilization was growing up.

The power of Pepi was very great but he was the last king of his Dynasty and age to hold such power. A revolution was coming which would eventually place a new line of kings upon the throne in the period which we know as the MIDDLE KINGDOM.

Government had become more complicated and kings had found themselves unable to deal with all the problems which arose, nor could they be in every part of the country at once. During the Fifth Dynasty there came into being the nomarchs, a class of nobles who were responsible for districts called NOMES rather as sheriffs were responsible for English shires or counties. These nomarchs were rewarded for their services with gifts of

land which, together with their offices, they handed on to their sons. This meant that there arose many wealthy and powerful families who, in course of time, got more and more power into their hands and finally revolted against the king, rather as the FEUDAL barons of England did. It was at this time that people began to feel that the king was not the only person who had a right to look forward to a future life; and so other people took to building tombs and claiming the sort of funerals which previously had been reserved for the king.

For about 100 years there was civil war in Egypt. During this time there were four dynasties of kings many of whom reigned for only a year or less before being deposed by a rival. Gradually it became a struggle between two great families, one in the north at Herculopolis, and one in the south at Thebes. At length the Thebans triumphed, their leader, Antef, became sole ruler of Egypt and set about restoring order in the country. Antef was the first ruler of the Eleventh Dynasty and with him begins the period we know as the MIDDLE KINGDOM. For 375 years there was peace and a strong government. The nomarchs were still rich and powerful but they were now loyal to the king.

In the days of the OLD KINGDOM there had been two types of people, the royal family and the peasants. Now a new type came into being—the middle class, we would call them—a class of skilled and educated people, the professional scribes, artists, sculptors and architects. The brains and hands of these people produced literature and art of such quality that they set a standard for the rest of Egyptian history, and writers of later periods copied the style of authors of the Middle Kingdom.

The power of Egypt was growing under the leadership of energetic kings. Senwosret III conquered a large area of Nubia and reopened a 600 year old canal, 34 feet wide and 26 feet deep, which was cut 260 feet through the solid rock. The warships of the king could now be taken through to the waters of the Nile above the FIRST CATARACT so that they could patrol the freshly conquered land. Senwosret also fought campaigns in Syria and Palestine but it was several hundred years before these lands were conquered.

THE KING OF THE WATERS

A KING who plunders distant lands may gain prestige but he does not benefit his country if he neglects its real source of wealth. The wealth of Egypt comes from the Nile, and if left to itself the river will flood and make fertile a certain area of land each year, but whilst the land is flooded nothing can be planted, and when the floods recede the land will receive no further water until the following year.

Ever since earliest times men had realized that the river needed helping in its work. It was the Nile which caused Egyptians to develop a system of government; for when so many people depended upon the one river it was essential for them to unite to decide how to share its waters fairly. The canals and reservoirs which farmers dug spread the water, retained some for when the land was parched, and carried off any surplus. From December to May the Nile is at its lowest so that IRRIGATION became necessary. Water was raised from the canals to the fields with a *shadûf*—a type of crane with a leather bucket at one end and, at the other, a stone or clay weight which helped to raise the full bucket. The *shadûf* is a laborious means of irrigating yet it is still used in Egypt.

From the days of the earliest dynasties yearly records of the height of the floods had been kept but, in order that the officials of Lower Egypt could plan the corn crop and estimate the taxes which farmers would have to pay, Amenemhet III of the Twelfth Dynasty attempted to forecast the height of the flood. He gave instructions to his officials in the fortress of Semna, far upstream at the second CATARACT, to record the height of the Nile on the rocks, and to keep him informed.

In Lower Egypt there is a basin called the Fayyum which is joined to the Nile by a channel. In prehistoric times it had been a vast lake but by 2000 B.C. it was nearly all swamp. Amenemhet III enclosed 27,000 acres which he drained and turned into fertile farmland. He also built a reservoir, and dams and canals which controlled the flow of water in and out of the Fayyum according to whether the Nile was high or low.

The IRRIGATION work in the Fayyum must have made the country prosperous for, long after his death, people thought that Amenemhet himself had excavated this 40-mile-wide basin. The Fayyum is a lovely and fertile region so the ancients were probably right to praise him in the words:

“He makes the Two Lands verdant more than a great Nile.

He has filled the Two Lands with strength ...

The treasures which he gives are food for those who are in his following ...”

Besides his irrigation works he built a prosperous town called Shedet, meaning ‘that which has been excavated.’

Shedet stood in the middle of his new farmlands and nearby was a great palace known as the LABYRINTH. This was a maze of rooms and corridors covering an area of 800,000 square feet—more than the famous labyrinth of Minos in CRETE. Nothing of it remains to-day, but we have stories of travellers such as STRABO who reported that “It is a marvellous fact that each of the ceilings of the chambers consists of a single stone ... neither wood nor other building material having been employed.”

Peaceful and busy were the days of the Middle Kingdom when such great engineering works could be done, and trade, exploration and the arts flourished. But again a period of trouble lay ahead when the dynasties of the Middle Kingdom would give way to more powerful kings from the less fortunate regions of Asia.





THE FOREIGN KINGS

THEY came out of Syria or Palestine, riding in chariots. They were looking for fresh and profitable lands, for they were being pushed out of their own homes by waves of invaders coming from the north and east, and they cast longing eyes upon Egypt. ... Who they were we are not sure, but the Egyptians called them HYKSOS meaning the 'Rulers of the Foreign Countries'.

The Hyksos conquered Egypt quite easily for at this time the Egyptians had troubles of their own. There had been no strong king since Amenemhet III, and monarch had followed monarch at a very swift rate. It was a perfect opportunity for a foreign king to step in and take the throne for himself.

The Egyptians were not a warlike people; it is true they had plundered people weaker than themselves for the sake of gold, ivory or precious stones and they had explored the lands far to the south, but it does not take a nation of soldiers to do that. Moreover, the Hyksos had horses and chariots which were new and terrifying weapons to the Egyptian bowmen.

For about 200 years the Hyksos ruled in Lower Egypt. In Upper Egypt, around the city of Thebes, the Egyptian nomarchs ruled, though they may have had to pay tribute to their northern masters. A favourite 'tall story' of the Egyptians told how war between the Hyksos and the Thebans broke out because a Hyksos king, living in the Delta region, complained that the hippopotami at Thebes, 400 miles away, were keeping him awake at night! What he probably meant was that he had heard of the rumblings of plotters in the Theban court. The Egyptians hated the foreign invaders and, after one or two unsuccessful attempts, the nomarchs of Upper Egypt joined together under the leadership of the Theban Ahmose. He was the third member of his family to lead an army against the Hyksos; his grandfather fell in battle wounded many times in the head as is shown by his mummy, now in the Cairo Museum.

The attack on the Hyksos was successful and Ahmose was made king of a reunited Egypt in 1580 B.C. The Dynasty which he began is the Eighteenth, and the next period of Egyptian history is known as the NEW KINGDOM.

The Egyptians were intelligent and quick to learn, and having been shown how to fight by the Hyksos, they copied their weapons, the powerful compound bow, the scimitar and the long sword, and went on under the leadership of powerful kings to become the masters of an empire which reached as far as the River Euphrates and the frontiers of modern Turkey.

The picture on the left-hand page is based on an ancient Egyptian drawing of a shaduf such as is still used in the Nile Valley to-day.

THE GREAT DAYS OF EGYPT

Now begins the story of Egypt at the height of her power and wealth. For about 380 years, during the Eighteenth and Nineteenth Dynasties she was the most highly civilized and important power in the ancient world. Even when the days of Egyptian greatness came to an end with the Greek conquest in 333 B.C. the memory of her wisdom, learning and power lingered on and became a legend with both the Greeks and Romans.

The city of Thebes became famous for the luxury of its palaces, the magnificence of its temples and for the mysterious honeycomb of tombs cut in the rocks of the Western Desert on the opposite side of the Nile. From Thebes went forth the soldiers of the king and into Thebes poured the wealth of the East, the 'gifts', as they were politely called, of wood for temple buildings, of slaves and of tribute paid in golden vessels. The lives and homes of the wealthy Thebans grew more and more luxurious, whilst the subject nations struggled for their independence.

The kings of the Eighteenth and Nineteenth Dynasties needed to be tough warriors ready to lead their armies into battle and make long and trying campaigns into Syria and Palestine. Never more should Egypt be humiliated by foreign invaders but rather should she keep a strong hold on the territories of any Asiatic chiefs who might try to rebel. As well as a strong army a navy was needed and during the Twentieth Dynasty several fierce sea battles were fought as is shown by the pictures on the walls of the temple of King Ramesses III.

Among the greatest warriors of this period are Tuthmosis III, Seti I, Ramesses II and Ramesses III. They led their troops into battle themselves and they never tired of recording their victories on the walls of the great temples which they built at Karnak and Abu Simbel. Such accounts often describe how "His Majesty descended upon that vile enemy as though he were a falcon"—and of course won a complete victory. Any defeats are simply not mentioned, though we can be sure that the king did not always have it his own way. As though battles were not enough, the kings often celebrated their victories by using up their surplus energy by hunting lions.

PHARAOH Tuthmosis III has been compared to Napoleon: certainly he was the greatest military leader the Egyptians had and it was he who brought under Egyptian control all the lands as far as the Euphrates. His aunt, Hatshepsut, who had shared his throne with him for 21 years, was one of the first great queens in history. She insisted on the privileges of her royal birth to such an extent that she took the full titles of the king, insisted that she be referred to as a man and erected statues of herself in male costume. She even had the presumption to make her tomb in the VALLEY OF THE KINGS.



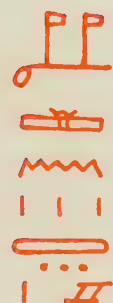
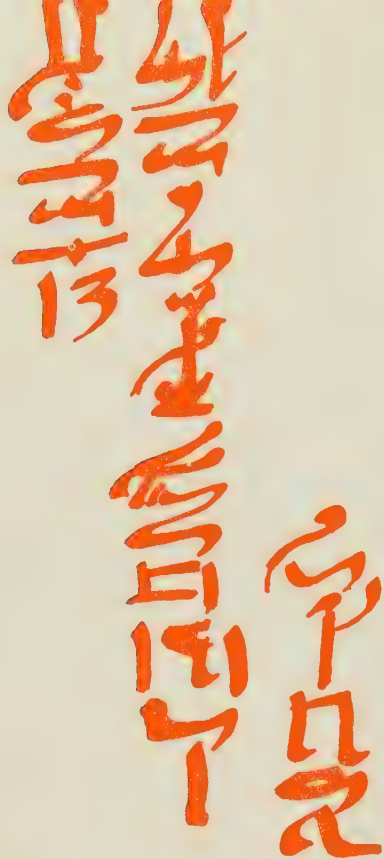


Just as the Romans lost their empire when they gave themselves over to luxury, so the Egyptians began to lose their hold on their territories in Asia. Amenophis III thought more of building for his queen a pleasure lake near their wonderful palace called the "House of Joy", or of shooting lions, than he did of maintaining his empire.

A later king, Akhenaton, was a great religious teacher and took no interest at all in empires. During his reign Egypt lost her hold on her foreign possessions.

After several centuries of unimportant kings, the 'beginning of the end' came in 671 B.C. when the Assyrians under Esarhaddon conquered Egypt. A few years later Ashurbanipal sacked Thebes. In 663 B.C. the Assyrians were driven out by Psammetichus, and for a while Egypt seemed about to recover her ancient glory. But this was the last time a native Dynasty ruled Egypt. Next came the Medes and Persians under Cambyeses, who attacked Egypt in 525 B.C. They were driven out but came back again in 350. When Alexander the Great came some years later the Egyptians invited him to take them into his empire so that they would be protected from the cruelty of the Persian rule. He founded the city of Alexandria which became the home of Greek learning for many years. For another 300 years or so Egypt seemed to be set on another period of greatness under a line of Greek pharaohs. Although they took over Egyptian titles and customs, they brought in their Greek civilization to mingle with the Egyptian, and were responsible for the famous lighthouse at Alexandria and the library which housed most of the learned writings of the Egyptians.

The history of ancient Egypt was over and the records of it lay in thousands of rolls of papyri. Imagine how much more would be known about the Egyptians if much of this library had not been destroyed by fire when the Romans captured Alexandria in 30 B.C. and made Egypt a province of Rome!



"Then a storm burst while we were at sea before we had reached land." Part of the story related on page 31 as it was originally written on papyrus in hieratic and in hieroglyphs.

WORDS AND WRITING

WHEN we were younger we enjoyed doing a type of puzzle made up of little pictures. A deer followed by somebody's name told us that it was the beginning of a letter. An eye and a log of wood stood for the words 'I would', and the word 'house' or 'dog' was represented by little pictures.

Men first felt the need to write when they wanted to remember things for a long while. A drawing of a jar or a basket, scratched on the wall, would serve to remind a person that he owed so much wine or corn to his neighbour. It was more difficult to make signs for such words as 'month' or 'day' until it was realized that sometimes pictures of the moon or sun would show the passing of time and that a pair of legs could mean not simply 'legs' but 'walk' or even 'journey'. Not even the cleverest artist, however, can draw pictures which stand for abstract words such as 'fear' or 'hope' or 'belief', so someone who enjoyed a pun thought of using the tricks which are found in our picture puzzles. 'Belief' sounds like *bee leaf*, so an artist writer might draw little pictures of a bee and a leaf and in time his readers would come to understand these signs as another word.

In Egypt some picture signs came to stand for letters which could be joined together to make words, and so the alphabet was born. The Egyptians developed a very beautiful set of little pictures which are known as **HIEROGLYPHS**. Some of the hieroglyphs stood for exactly the same sounds as some of our letters: a leg for 'b', an owl for 'm', or a snake for 'f'. Other signs stood for the sounds made by two or three letters so that a rectangle is 'sh', and another snake is 'dj'. Even more difficult for us to pronounce are the hieroglyphs  and  which stand for 'nfr' and 'hṯp'.

Although we know the Egyptian alphabet we do not know how they pronounced some of their words for they had no signs for the vowels. If we were without vowels



Gathering papyrus.

we would have to write 'Tom Smith' as *Tm Smth* which would puzzle anyone who did not know, for he might think that the boy's name was Tim Smoth or even Tum Smeth!

Other HIEROGLYPHIC signs called DETERMINATIVES were used to make quite sure that the reader understood what a word meant; for instance, a set of signs might say 'the man gave the boys a lesson', and this would be followed by a little picture of a teacher holding a stick. There would then be no doubt in the reader's mind what a lesson was!

The hieroglyphic signs were carefully and often very beautifully carved and painted, and were used as decoration as well as for conveying information. But it was a lengthy business to draw and carve these complicated little pictures and, as more and more writing became necessary for the business of government or for letters, a quicker form of writing came into use. This less complicated HIERATIC script developed as scribes tried to make hieroglyphic signs quickly with a rush pen on a sheet of papyrus. At first the hieratic signs were very like the hieroglyphs, but as time passed they developed shapes of their own. We could say that as our handwriting is to block letters, so hieratic was to hieroglyphic.

People who write a great deal and at speed tend to make letters carelessly so that strangers find their writing difficult to read. This happened with the hieratic writing. By the eighth century B.C. it had degenerated into a form of writing we know as DEMOTIC.

After the conquest of Alexander the Great in 333 B.C. Greek became the official language of the country, but the old language did not die out amongst the people. When Christianity had spread to Egypt there grew up a body of Christians known as the COPTS. The COPTIC Church conducted its services (and does to this day) in a form of the Egyptian language. In the same way the Roman Catholic Church still uses the dead language, Latin. Coptic is written in the Greek alphabet to which were added seven characters from the Demotic script. This language, a relic of the past, was the only link with the language and writing of the ancient Egyptians and it proved very useful to scholars when they came to work out the meanings of Egyptian inscriptions and documents. The Greeks described the hieroglyphs as 'sacred writings', and indeed by Greek times they were used only for religious inscriptions and could only be understood by the priests. But there is nothing magical about them, and it has been possible to find out what they mean.

The search for the meaning of the hieroglyphs could be compared with the work of an intelligence agent trying to break down the enemy's code so that he can read a secret message.

The story begins in 1799 with an officer of Napoleon's army. Napoleon had invaded Egypt in the hope that it would bring him nearer to the British forces in India. The French soldiers were ordered to collect stones and strengthen a fort which they held near the town of Rosetta in the Western Delta. A sharp-eyed officer, mindful of Napoleon's order that

This famous statue of an Egyptian scribe is in the Louvre in Paris.

Photo: Mansell.



curios and works of art should be preserved, noticed a black basalt slab covered with strange marks and he saved it from being used as a building block.

When the French were driven out of Egypt the Rosetta Stone passed into British hands and in 1802 came into the possession of the British Museum where it can be seen to-day. It was found that the stone had been inscribed and set up in 196 B.C. by Ptolemy V, one of the

Greek kings of Egypt, and was written in two languages—Greek and Egyptian. The Egyptian version was inscribed both in the hieroglyphic and demotic scripts. It seemed fair to assume that all three inscriptions were versions of the same thing and it was fairly simple to translate the Greek. The meaning of the Egyptian was understood, therefore, but the way it was written still had to be worked out. Much of the demotic alphabet was already known and it had also been discovered that royal names had oval shapes or CARTOUCHES drawn round them. One of the names in a cartouche must be *Ptolemy* as the Greek version of the inscription referred to him.

An English scientist named Dr Young, who worked out the theory of light but whose hobby was oriental languages, compared the three versions of Ptolemy's name and so was able to give alphabetical equivalents to some of the hieroglyphs.

Soon afterwards there was found an OBELISK bearing the name of Cleopatra. If the two names are written in Greek they appear as *Ptolemaios* and *Kleopatra*.

Suppose we write:

PTOLEMAIOS

I 2 3

we will also have to write:

KLEOPATRA

3 2 I

for the same letters occur in each. Once we know so much we can be sure that the first hieroglyph in *Kleopatra* stands for *K* and that the one which occurs twice must stand for *A*.

A learned Frenchman named Jean François Champollion, who was already an expert in ancient languages, finally deciphered the hieroglyphic writing after patiently comparing inscriptions. He picked out the signs he knew, puzzled out the meanings of others, occasionally guessed a word in one sentence and tried if the same meaning made sense in another.

The principle upon which Champollion worked was the one which we find in some intelligence tests:

‘If QWRT means *loaf* what does TWRQ mean?’ We find this easy, but Champollion had to work with Greek, Coptic and Egyptian words written in different scripts. He compared not just two words at a time but passages from perhaps a dozen inscriptions or papyri. He succeeded, not only in understanding Egyptian but he also learned something of the rules of the language for he wrote a book of Egyptian grammar. Other EGYPTOLOGISTS after him discovered much more about Egyptian and made it possible to draw up a dictionary of hieroglyphic words.

The writer of history does not only read memorials and tombstones, neither does the Egyptologist restrict himself to inscriptions upon STELAE and temple walls. He also reads the papyrus rolls and the fragments of pottery called OSTRACA upon which the Egyptian schoolboy wrote his exercises or the storyteller his tales. So we have not only the lists of kings and their great doings, but also recipes, doctors’ prescriptions, jokes, private letters and proverbs to tell us what sort of people the ordinary Egyptians were.

WE READ WHAT WAS WRITTEN

“... Then a storm burst while we were at sea and before we had reached land. The wind rose and redoubled in force. ... Then the ship perished and of those who were aboard not one remained. And I was deposited on an island by a wave of the Great Green ...”

... We read on, confident that any story which begins in this way will prove exciting, for the ‘shipwrecked sailor’ or ‘desert island’ type of story has been one of the most popular from the days of Sinbad to those of Robinson Crusoe or *The Coral Island*. Yet the story of Sinbad was not the first of these stories for the Egyptians enjoyed the Story of the Shipwrecked Sailor long before the time of the Arabian Nights.

The Egyptian story tells how there was once a sailor who was the only survivor of a shipwreck. He was cast on to a desert island which was filled with wonderful flowers and fruits, and there he met a frightening but kindly serpent-god whose body was plated with gold and whose eyebrows were of real LAPIS LAZULI. The sailor threw himself on the ground in front of this serpent who then spoke kindly to him and foretold that he would be rescued by his countrymen in four months’ time and taken back to his family in Egypt. And so it happened; the sailor was rescued and he returned safely, bearing with him rich gifts for the Pharaoh who rewarded him and praised him in the presence of the whole court. ...

An amazing adventure with a happy ending makes the sort of story that has always been enjoyed. Another well-known Egyptian story is equally happy in the way it ends, for its hero, Sinuhe, after living many years in a far country, comes safely home at the king’s invitation and ‘lives happily ever after’. In his old age he sat in his house and watched his stone pyramid being erected in the shadow of the king’s pyramid and at the king’s expense, for, as he said, “It was His Majesty who caused it to be made. There is no humble man for whom the like had been done. And so I enjoy the king’s favour, until the day of death cometh.”

Stories are not, however, the only form of literature which has come down to us. We have examples of hymns, proverbs, letters and poetry. Some of the most beautiful words in Egyptian literature are those which were written during the time of Akhenaton, the nature-loving worshipper of ATON. Here is part of a hymn to Aton:

"Thy rising is beautiful on the horizon of heaven, O living Aton. ... When thou dawnest on the eastern horizon thou fillest every land with thy beauty ... when thou settest on the western horizon the earth is in darkness in the likeness of death. ... Trees and herbage grow green; birds flutter in their nests, their wings outstretched in praise to thy spirit ... the fish in the rivers glide to greet thee ..."

* * * *

Most of us learn the principles of good behaviour from religious teachers. Although religion played a great part in the lives of the Egyptians they learned these lessons from wise men rather than from the priests. There was a wise man named Ptahhotpe who lived in the Fifth Dynasty (about 2650 B.C.) and who wrote a book which he called *An Instruction*. Some of his advice concerns behaviour at table: "Take that which is set before you. Look not at that which is set before him but at that which lies before you. Laugh when your host laughs. That will be well pleasing in his heart." In another place he writes of courtesy and kindness: "Be not proud because you are learned; but discourse with the ignorant man as with a sage" ... "Satisfy your hired servants—it is your duty" (although servants were slaves who could be bought and sold) ... "Love your wife, fill her stomach, clothe her back; gladden her heart ... be not harsh, for gentleness masters her more than strength. Give her what she sighs for, so shall you keep her in your house."

Many of the writings of another wise man, Amenemope, who lived in the Twenty-first Dynasty, are very like parts of the Book of Proverbs in the Bible. This is not really surprising for there was considerable trade between the Egyptians and the Hebrews, and ideas would travel along the trade routes, or scholars would join a caravan and meet and talk with the scholars of other lands. We have received many of our ideas from the Hebrews; it is possible that some of the wise sayings which we cherish came originally from Egypt.

We say that 'half a loaf is better than no bread'; an Egyptian would say that "half a life is better than dying altogether". Another bit of homely wisdom was "Don't rejoice over what has not yet happened"; our proverb says, 'Don't count your chickens before they are hatched' ... "It is what God commands that happens", sounds very like our 'Man proposes, God disposes'. These and many other little sayings have come down to us and help to show that the Egyptians thought and acted like us in many ways.

* * * *

An archaeologist of the future would probably be very interested to read some of the newspapers of our own day. He would be able to read in them accounts of the trials and troubles which were once front page news. Although the Egyptologist cannot study hieroglyphic newspapers, he has been able to read in papyri accounts of trials and strikes which made big news in their own day. The workmen employed in excavating the tombs in the VALLEY OF THE KINGS were paid in rations of grain, fish and vegetables and were provided with clothing and oil. A papyrus of the time of Ramesses III tells how, when times were bad, they did not receive their rations. The workmen struck and marched in protest to ask their Good Lord, the Pharaoh, that "means of sustenance may be provided for us". Unfortunately they were only given part of what they asked for so, after a few days' quiet, trouble broke out again. Many a thief of our own day has pleaded that poverty drove him to



When questioned at a trial the accused's memory was helped by 'beating with a stick'.

crime so it is not surprising that, during the Egyptian troubles, many a man turned to tomb robbery or that sometimes the priests in charge of the tombs accepted bribes to encourage them to 'turn a blind eye'.

Accounts of the trials tell how the accused pleaded their own cases and how they were questioned with the help of a "beating with the stick". Torture was a recognized part of a trial and all who were accused expected it. Those who gave false evidence had their ears and noses cut off, and the guilty were either imprisoned or put to death by impaling. It must have been a desperate or a greedy man who would risk arrest by one of the Pharaoh's Nubian policemen to undergo the terrors of a state trial!

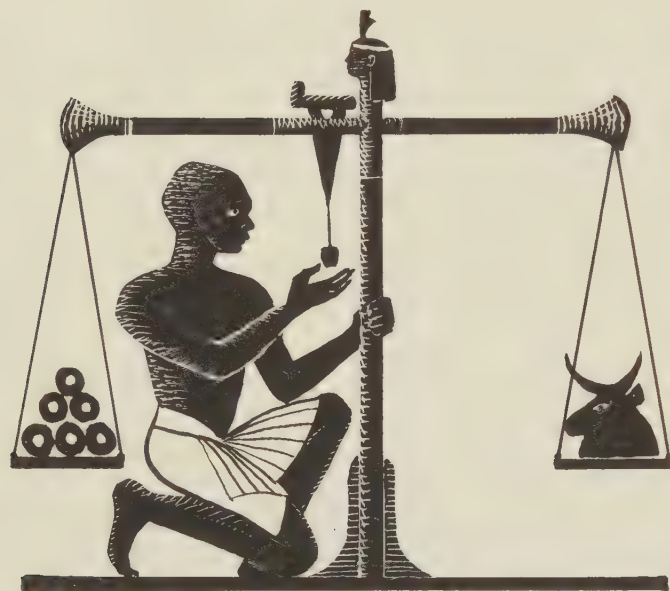
Other writings which give the Egyptologist an insight into some of the more intimate details of Egyptian life are the letters, written on papyrus. Letters on earthenware vessels were even written to the dead. It was thought that a deceased wife, husband or parent could continue to take an interest and help in such family problems as might arise through illness or misfortune or quarrels about property. Most of these letters were written in rather formal language by scribes who made a living by doing for ordinary people what they could not do for themselves.

The scribe was an important man, and it was the ambition of many a clever Egyptian boy to become one. With his kilt stretched tightly across his knees to form a sort of desk, he would sit cross-legged with his eight or nine yard long papyrus roll in front of him. He made his brush by cutting a length from a rush stem and chewing the end to break the fibres and make a point. Beside him would be his ivory or wooden palette carved with his name or with a prayer to Thoth, the god of letters, and fitted with a slot which held his brushes. His ink was made either from soot, or from finely ground red ochre. The powders were mixed with gum and water and made into little bricks which were fixed on his palette. When he wanted to write he wetted his ink with water and dipped his brush into it. With this he wrote—going from right to left and from top to bottom of the square of papyrus which was in front of him. If he made a mistake he wiped it out either with a 'rubber' made

of quartzite sandstone, or with his tongue.

The Egyptians knew how to make their papyrus as early as 3100 B.C. for a blank roll has been found in a First Dynasty tomb. They were still using it nearly 3000 years later when the Greeks arrived and gave it the name *papyros*, from which we get our word 'paper'.

So, not only have the words and thoughts of the Egyptians come down to us, but also the very name of the material on which we write or read to-day.



Scales were surmounted by the head of the goddess Maat wearing a feather, the symbol of truth. Here gold rings are weighed against a metal ox-head.

SUMS AND SCIENCE

THERE are two reasons for seeking knowledge; some of us rather unwillingly learn arithmetic or a foreign language because we know that we will have to do some calculations in the future or make ourselves understood when we travel abroad. On the other hand, we read books on Egyptology or music simply because we are interested in the subject and wish to know more about it.

The Egyptians were rather like the unwilling pupil. They loved beauty and comfort and lived well regulated lives, but they did not care very much about knowledge for its own sake. In order to grow their crops they had to know when to expect the Nile floods and how to regulate the flow of water. It was necessary therefore to have a calendar and, from their patient observation of the stars, they were able to make one as early as 4241 B.C. So that farmers would not quarrel about the ownership of fields they had to learn how to measure land. In order to build their pyramids and temples it was necessary to learn how to calculate volumes and weights. So by about 1500 B.C. there had developed the science of geometry (which means simply *earth measurement*) and later the Greeks, who were genuinely interested in the subject, based their own work upon the valuable discoveries of the Egyptians. It is from the Greek scholars Euclid and Pythagoras that we have learnt our mathematics.

Although they gained considerable knowledge the Egyptians were not really mathematicians. They preferred to work slowly with 'ready reckoners' than to try to understand the subject or to invent speedy ways of calculating. They could not do multiplication or division as we do, but worked out their problems by 'nodding the head'—in other words by counting.

The Egyptian numbers from 1 to 9 were made up of strokes which could easily be counted: | one, || two, ||| three, |||| five and so on; ten was a loop $\cap$ so that 50 or 70 would be made up of 5 or 7 loops: $\cap\cap\cap$ 50. Other signs were used for 100 and upwards:

100 𐦩 , a piece of rope; 1,000 𐦪 , a lotus plant; 10,000 𐦫 , a finger. 𐦬

The Egyptians multiplied by doubling numbers in succession until they got the number they wanted. They found it easier to count 6 seven times than to multiply 6 by 7.

Division sums were done in the same slow way: "Count with 7 to make 56" meant divide 56 by 7.

To do sums like these only the two times and the ten times tables are needed, for, just as we multiply a figure by 10 when we add a '0', they did the same when they changed a 1 to a $\cap$.

The hieroglyphic sign of two walking legs 𐦴 was used to mean '+' or '-' according to which way they walked: forwards meant adding, backwards meant subtracting.

The Egyptians did not like fractions and tried to keep them as simple as possible. For us who can juggle with them quite easily, the problem 'How much bread would 10 men get if 9 loaves were divided between them?' is one which we could work out in our heads. The answer is $\frac{9}{10}$ of a loaf but the Egyptian could not imagine $\frac{9}{10}$ for he was only able to imagine one part of anything at a time. By cutting up the loaves into pieces it was found that each man would get $\frac{1}{3} + \frac{1}{3} + \frac{1}{5} + \frac{1}{30}$ of a loaf. The bread must have been in a terrible mess before the last man received his share!

So that those who came after him would not be puzzled over this and other problems an ingenious man of about 1650 B.C. set out the answers on a scroll which is known to us as the RHIND PAPYRUS and which now rests in the British Museum. From this document we find that gang leaders had to share out the rations amongst their men—keeping for themselves a double portion; perhaps the mental strain of this was so great that they needed the extra bread and beer!

The papyrus was not intended as a text book of mathematics but rather as a collection of examples. Numbers had no interest for the Egyptians unless they were numbers of *things*—cows, loaves or CUBIT lengths. That is why, as far as we know, there were no great Egyptian mathematicians. They did not want to go any further in their discoveries for, as long as they had a way of finding the area of a circle, the volume of a pyramid, or were able to work out ways of reckoning and sharing their corn, they were content. After a great deal of trial and error, but with no real understanding of the reasons, they found the answers to a set of problems and wrote them down for others to copy. There is, however, in the RHIND PAPYRUS one problem for which we can see no real use and which reminds us of the old story of how 'I was going to St Ives'. We are told that an old woman had 7 houses, each of which contained 7 cats; that each cat caught 7 mice and thus prevented each mouse from eating 7 barley corns which would each produce 7 bushels of grain. We are then asked how many bushels did the cats save. The correct answer (which you may easily check by calculating $7 \times 7 \times 7 \times 7 \times 7$) is given as 16807.

Just as the arithmetic and geometry of the Egyptians were intended to be of practical use, so were most of their other scientific achievements. As we have seen, they were able to take note of the weeks, months and years by observing the stars, but something was needed which would show what time of day or night it was. A shadow clock could be used during the hours of daylight but it would be no use at night. A very ingenious invention was the water clock for, although the principle is easy to understand, a great deal of patience is

required to make one which will work accurately. Water flows out through a hole in the bottom of a vessel, the sides are marked off with 24 divisions and the flow is adjusted so that it takes a full day for the bowl to empty. Problems arise when marking off the hours for the vessel has to be narrow at the bottom if all the water is to flow out; the last inch or so will flow more slowly as the pressure of water is less than when the bowl is full.

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The mummy of the Pharaoh
Seti I.

Cairo Museum.

Four hundred years ago some people believed that pounded fragments of MUMMY were a cure for cuts and bruises, so those who lived in Egypt at that time did a brisk trade in selling pieces of the mummies which they found in ancient desert tombs. There is, however, nothing magical about mummies for, as we know, they are merely dead bodies which have been kept from decay by being treated with preservative, which was thought at that time to be *mumiya*, an Arabic word meaning bitumen or pitch. This was a mistake, for we know now that what they called *mumiya* was in fact molten resin. Resin may be good for bruises, but it does not have to come from a body 3,000 years old. Bitumen or pitch is not considered to be a good cure, but the name *mummy* has remained to remind us of a strange belief of not so long ago.

The Egyptians themselves have not told us much about the way in which they set about the task of preserving bodies, but we have learnt a great deal from Greek writers such as HERODOTUS who show us that the embalmers must be numbered among the world's first practical scientists.

The cheapest method of mummification was to clean the body inside and out before wrapping it in a linen shroud and burying it in the dry sand of the desert. A little more expensive and reliable way was to inject 'cedar' oil into the interior of the body to dissolve the internal organs, and the body was then carefully bandaged. These were cheaper and simpler processes, but for kings and others who could afford it 70 days were spent by experts in making a mummy which would last for 3000 years. A cut was made in the side of the stomach and all the internal organs except the heart (for that was regarded as the seat of all intelligence and life) were removed to be placed in separate CANOPIC JARS. They did not realize the importance of the brain or the embalmers would not have treated it in the drastic way they did. After breaking a bone in the nose they were able to insert a long hook and extract the brain bit by bit through the nostrils.

Once the body had been emptied and cleaned it was treated with carbonate of soda and packed with wads of linen, sawdust and resin. After being anointed with 'cedar' oil it was bandaged in an intricate way, one limb at a time. Finally, gum or molten resin was poured over all and the mummy was ready to be decorated and carried to the tomb.

It may seem strange to us that so much care should be lavished on a dead body, but it was through their religious interest in the dead that they came to understand something of

*A funeral procession taking the dead man across
the Nile to be buried in the West.*



the living. Other peoples of the past either practised cremation or were forbidden by their religion to cut up dead bodies. The Egyptians were the first really to understand and write on the subject of ANATOMY and, although they did not know the functions of all parts of the body, they knew their positions and were able to name them. They knew nothing, for instance, of the nervous system, and although they could see that the blood flowed from the heart to every part of the body, the actual circulation of the blood was not discovered until A.D. 1619 by William Harvey.

As in other branches of science the Egyptians learned what would be of use to them. Egyptian doctors could cut out tumours and even dared to operate on the head. There were dentists who pulled out teeth with iron implements and filled them with a mixture of frankincense, yellow ochre and MALACHITE. Broken limbs were set with splints, wounds were stitched and made comfortable in a way which would satisfy a modern doctor. A present day first-aider would probably find that he was much less skilled at bandaging than the Egyptians who had gained experience in swathing mummies.

Just as long experience with mummies taught the Egyptians some surgery and anatomy, so, by much trial and error with various remedies, they discovered many medicines which remained popular until quite recently. Castor oil can still be bought at the chemist's, though modern people would not care to chew its seeds and wash them down with beer as the Egyptians did to ease their stomachs. Another of their remedies, hartshorn (a form of ammonia extracted from the antlers of a deer) was used to revive fainting women until chemists found a cheap way of making ammonia.



A scarab beetle and a sacred eye, amulets worn to ward off evil.

Many of these recipes for medicines can be read in the papyri which have survived. It is possible that some of them did cure the patient but others are so revolting that they can only have made him sick. For a cough, cream and honey were swallowed with beer for four days. This sounds reasonable, but the cure for baldness reminds us of the ingredients of a witch's brew for it demands that the "fat of lion, fat of hippopotamus, fat of crocodile, fat of cat, fat of serpent and fat of ibex be mixed together and rubbed into the scalp"!

As illnesses were thought to be caused by evil spirits really unpleasant means were used to drive them out of the body. Sometimes a mixture of animal fat and dung was swallowed, and skinned mice were given to children for their diseases—probably as a last resort—for the mummies of children in very old graves have been found to contain dead mice.

These strange remedies were thought to have a magical power and were accompanied by the recitation of spells or the placing of charmed AMULETS and knotted cords over the seat of the pain. No doubt the magic words, charms and medicines played a great part in curing the sick for they would encourage the superstitious patient to believe that he was getting better. Even to-day there are some who do not believe that they will be cured unless the doctor prescribes for them some brightly coloured and foul tasting medicine.

The Egyptians were not great thinkers but they were observant, and when their observations were accurate, whether they were concerned with arithmetic, astronomy or medicine, they were able to hand on discoveries of value to those who came after.

A King between the hawk-headed god, Horus, and the jackal-headed Anubis.



THE GODS OF EGYPT

A native of the jungles of New Guinea saw a tape recorder for the first time and called it a 'spirit box'. He could not understand anything about the sound waves or electric currents; to him the sound of his own singing coming from the loudspeaker was caused by wicked little spirits who had stolen his voice and taken it with them into the box. Often when people cannot understand anything and there is no one to explain it to them they make up a story about it.

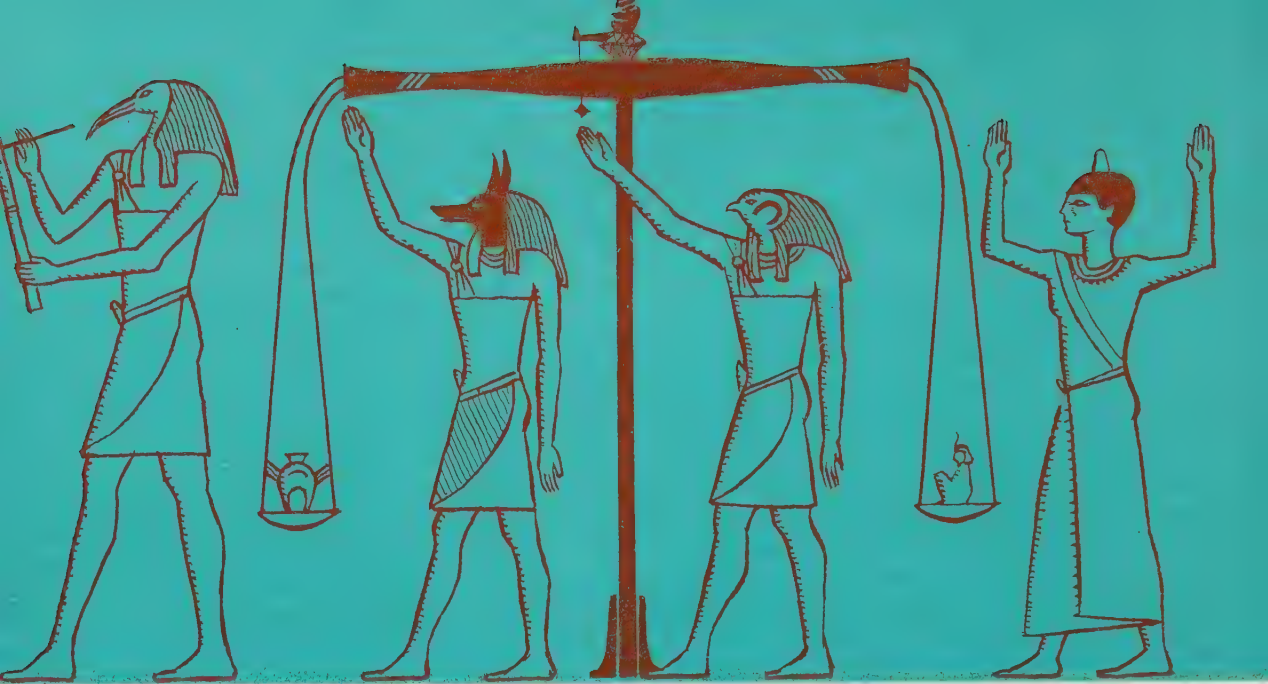
The Egyptians saw the corn grow, they cut it, stripped the fields and threshed it. Some of the seeds were thrown into the Nile mud and a miracle happened: the corn grew again. This is wonderful, but we have come to take it for granted and talk very knowingly about seeds and germination and the chemistry of the soil. The Egyptians made up a story instead: There were two gods, Osiris and Seth, who quarrelled about who should own Egypt. Osiris the good god was murdered by Seth his evil brother, his body was cut in pieces and thrown into the Nile. In the spring his wife, Isis, came to help him and brought him to life again. ... The story of Osiris is the story of the crops and so he was regarded as a god of nature. He was also a god of the river which watered the crops, and of the sun which ripened them.

When kings became the powerful guardians of the food supply they were thought of as living actors in the Osiris story. During his life the king was HORUS, the son of Osiris, and when he died he became one with Osiris himself, for we must remember that the king was not supposed to die. If he, the provider, died all his subjects would die too.

After the revolution at the end of the OLD KINGDOM, when the wish to enjoy a second life was shared by ordinary people, everyone claimed that he also became Osiris after death. The worship of Osiris became very popular, for he was a god who had an effect upon the life of everyone, and whose story was told again every year with the passing of the seasons.

We would not dream of worshipping animals, but we do not see anything strange in the idea of choosing an animal for a badge, a coat of arms or a mascot. The man who takes a lynx as his badge hopes that people will think of him as a fierce fighter, and the man with a bull on his shield wants you to know that he is strong.

Since very early times people have worshipped animals because of some wonderful ability or virtue: a hare is swift, an owl is supposed to be wise, a cow is a generous mother, and a lion is brave. The Egyptians called their NOMES after animals; there was the 'Hare Nome', the 'Crocodile Nome' and the 'Jackal Nome'.



The heart of the dead man is weighed against Truth. He awaits the verdict which Thoth writes down. The other gods are Anubis and Horus.

At Heliopolis, however, the local god was not an animal, but the sun. By the time of the Fifth Dynasty the priests of the sun-god had become very powerful and founded a line of kings. From that time onwards the worship of the sun-god Rē became the state religion to which all had to belong.

The priests of various nomes agreed to worship Rē but felt that their animal gods should share the honours. For example, Sobek, the crocodile god of the Fayyum became Sobek-rē. When in the New Kingdom Thebes became the capital city of Egypt, the local god, Amun, was worshipped as Amon-rē in order to make him the most important god in the land, and as his empire grew his priests grew in wealth and power.

The Egyptians did not like change; the seasons and floods followed each other regularly, things went on as they had in grandfather's time. Why should they change their gods just because the state priests called on them to worship Rē? As the lands of Egypt came together, and travel between village and village became more common, the ideas about various gods travelled too. There had to be no change, so the freshly discovered gods were fitted into the family and related to one another as well as to Rē. In this way no one gave up his beliefs and all worshipped the gods they had been used to whilst they still enjoyed the benefits of the rule of Rē who looked after all of them.

It is difficult for us to understand what their thoughts were when they joined some of their gods together. The ancient god Ptah, the patron of the craftsmen of Memphis, came in time to be worshipped in the form of the bull *Apis*. In a vast underground LABYRINTH at Memphis are 24 great stone tombs in which were laid the bodies of a series of sacred bulls. Among other animal gods were *Anubis* the jackal, guardian of the cemeteries; *Thoth* the IBIS-headed god of writing; *Hathor*, the cow-goddess of love and joy; *Wadjet*, the cobra, a symbol of royalty whose image was fixed on the front of the king's crown so that she could spit venom and death to his enemies; and *Bastet*, the cat-goddess. There were cat

cemeteries at Bubastis and Sakkara, and in later times cats, ibises and other animals were mummified and buried in coffins of their own shape.

The religion of Egypt had been developing on these lines from the times before the dynasties began until, in 1375 B.C., there came to the throne King Amenhotpe IV who taught that there was only one god, the disk of the sun, whose name was ATON. He refused to have anything to do with the god *Amon-rē*, so he changed his name from *Amenhotpe*, which means 'Amun is content', to *Akhenaton*, which means 'It pleases Aton'.

He believed that the beauty of nature was created by Aton and he wanted men to look at nature with fresh and understanding eyes. His god was a symbol of truth and he commanded his artists to paint the truth in what they saw so that even a king should be shown as he was, instead of as a figure stiff with inhuman dignity.

The people of Egypt took little notice of what he did and continued to worship Osiris and their other old gods. The priests of *Amon-rē*, however, hated his revolutionary teaching for they stood in danger of losing their temples and the wealth which poured into them as tribute from lands which had been conquered for *Amon-rē*. *Akhenaton* left the royal and sacred city of Thebes and built for himself a new city called *Akhetaton*, meaning 'Horizon of the Aton', where he lived with his beautiful wife, *Nefertiti*, and there he could worship his god in temples open to the rays of the sun instead of in the 'dim religious light' of the temples of *Amun*.

The new religion did not last any longer than its founder. After 20 years *Akhenaton* died, the next king took again the name of *Amun*, and the worship of the ancient gods went on as before.

For most of us our religion teaches us how we should behave, not only towards the god whom we worship, but also towards other people. For the Egyptians, as indeed for other ancient peoples, religion was a magical code for making sure that everything in the world went smoothly. A man prayed to a particular god to ensure that the sun shone, the crops grew, or that the skill of a craftsman did not leave him.

—Compared with most other ancient people an Egyptian had a very strong sense of right and wrong, and he believed that when he died Osiris would sit in judgment upon him, weighing his heart in a balance against a feather, the symbol of truth. At this trial he would have to recite a confession which contained these words: "Behold me! I have come to you without sin, without deceit, without evil. ... I have given bread to the hungry, water to the thirsty, clothing to the naked and a boat to him that had none. ... Be ye my protectors and make no accusation against me before the Great God. ..."

The wise god of scribes, *Thoth*, would stand by to make a note of the way the scales tipped. If the man's heart balanced the feather he would be pronounced "'true of voice'," and he would win life and happiness in the kingdom of Osiris. If, however, his heart was not found true he would be given to a monster—part crocodile, part hippopotamus and part lion—to be torn to pieces.

When a dead man's name was written on his tomb the words 'true of voice' were added rather as we put 'R.I.P.' on someone's tombstone to-day. The dead man was buried with spells from the BOOK OF THE DEAD engraved upon his coffin. It was believed that these would prevent his heart from 'speaking against him' in the judgment hall of Osiris, and so act as a passport to the other world.

Although the gods judged a man when he died it was not the gods who taught good behaviour; they could be deceived quite easily when the time came! Whatever virtues the Egyptians had they learned from wise men or great pharaohs, or through long experience that life was more pleasant if people were well behaved.

THE ART OF THE EGYPTIANS

WHEN we look at a painting of a place we expect it to tell us what it looks like. We expect the people in the picture to look natural—as if the artist found them working or playing and painted them just as he saw them. If he showed some of the people bigger than the others we would object to it and say it was not lifelike. We would not like it either if he drew the sun as a circle with a lot of rays poking out from it, or showed us the eggs in a bird's nest when we were looking up at the tree in which the nest was built. We know that children make pictures in that way because they want to show us everything quite clearly, for to them a nest only looks like a nest when seen from above; and, although the sun never does look like a sun-flower, the child wants us to understand that it was shining very brightly. We like our pictures to be realistic as a photograph is, and we like our statues to be as lifelike as those of the Greek sculptors.

Yet when we look at a map of a village we do not complain because the village does not really have red and yellow roads or a church shaped like a square with a cross on top of it. We accept these *conventional signs* because we know that they are meant to tell us what sort of roads they are, or that the church has a tower.

Egyptian artists used *conventional* figures too. Human figures, unless of servants or foreigners, who were thought not to matter, were always shown with the face in profile—that being the most interesting view—but with a full view of the eye (that is why ancient Egyptians seem to have such large eyes). The shoulders again are drawn from the front view but the rest of the body is seen from the side. An important person was always made to look larger than those around him, whilst distant objects are shown in another panel above the main picture. Events which happened at different times are shown in the manner of a strip cartoon which might run right round the walls of a room. On the walls of a *Middle Kingdom* tomb is a series of little drawings of wrestlers which shows all the movements so closely that they could provide material for a Walt Disney cartoon.

Everything that was worth showing was put in, so that, if there was a garden with a pond in it, the trees around it would be seen in a side view, but the fish in the pond would be lying on their sides on the top of the water.

The artist who painted or carved a relief probably enjoyed his work and possibly would have been pleased if he knew that those who looked at it had enjoyed it too; but, although he sometimes put in little humorous touches and, above all, loved to draw the animals and birds which he saw in the fields around him, he did not create 'art for art's sake' as our artists do. His intention was to tell a story and, providing one understood the *conventions*, he told it in the best way he could.



This well-known head of the beautiful Queen Nefertiti was found (in a sculptor's workshop) at Amarna.

Photo: Mansell.

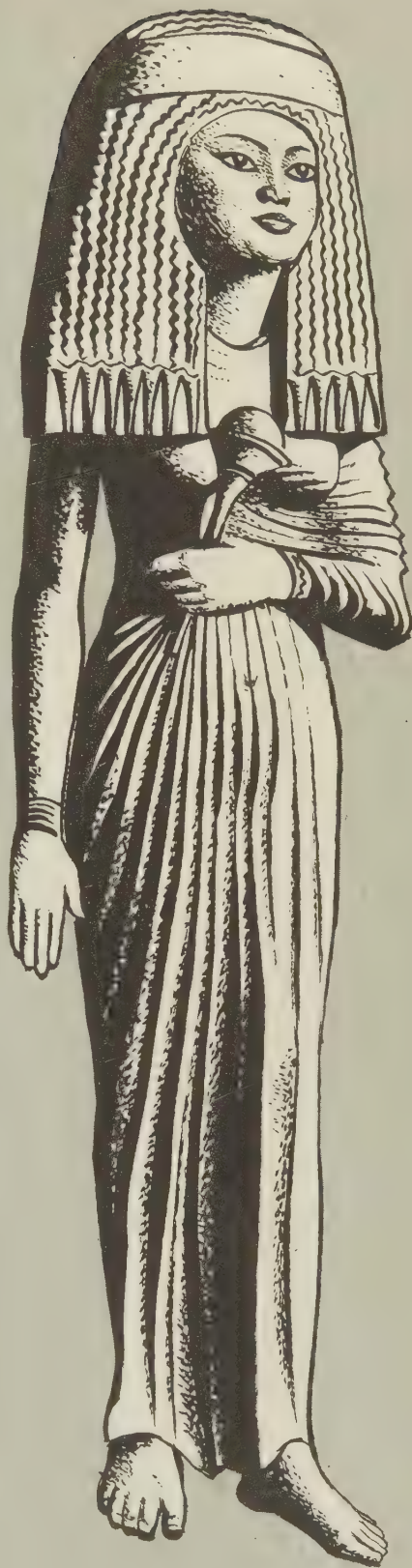
The Egyptian sculptor was “‘one who makes to live’,” for that is what the Egyptian word for sculptor means. He made tomb statues which could take the place of the dead man and receive food offerings; just as a relief showing a noble enjoying a hunt would ensure that he would enjoy hunting in the next world. The sculptor also produced SHAWABTIS, which were placed in the tombs to wait upon the dead man in the next world.

The sculptor observed *conventions* just as the painter did. He made the body of a statue as a body ought to be, in good health, not too fat nor too thin, nor were deformed limbs shown. In nearly all standing statues men have the left foot forward whilst women stand with their feet together. Statues of people were meant to be looked at from the front so the heads face forwards, but some animal statues which stood at the sides of gateways have their heads turned so that they may see who is approaching.

Though it is possible to tell the difference between work which was done in the Old Kingdom and the work of the Middle or New Kingdoms, Egyptian art carried on in very much the same way for hundreds of years—until there came a king with some new ideas. Akhenaton, who wanted to change religion, also caused artists to break many of the rules which had previously bound them. He believed that art should tell the truth about people and about nature or the first time artists could show the king as a human being, even standing a little crookedly because he was deformed. The king no longer had to look aloof, he could be shown enjoying life with his family. Akhenaton and his beautiful wife Nefertiti had themselves painted as affectionate human beings, and one of the most famous pieces ever modelled by an Egyptian sculptor was a bust of the beautiful Nefertiti herself.

The stiff straight lines of the past gave way to curves, and pictures were made which had a kind of *perspective* for they showed things as they would appear to a man in a chariot or on a hill.

Although modern people sometimes find it difficult to understand Egyptian art, they can appreciate the bright, clear colours. The Egyptians loved colour and they usually used those which were obtained from natural minerals of the earth. Red and yellow were ochres, green and blue were copper ores, white was gypsum and black, soot. The artist mixed his colours with water and gum and worked with a brush made of palm fibre or the tough esparto grass which is to-day used for paper-making.

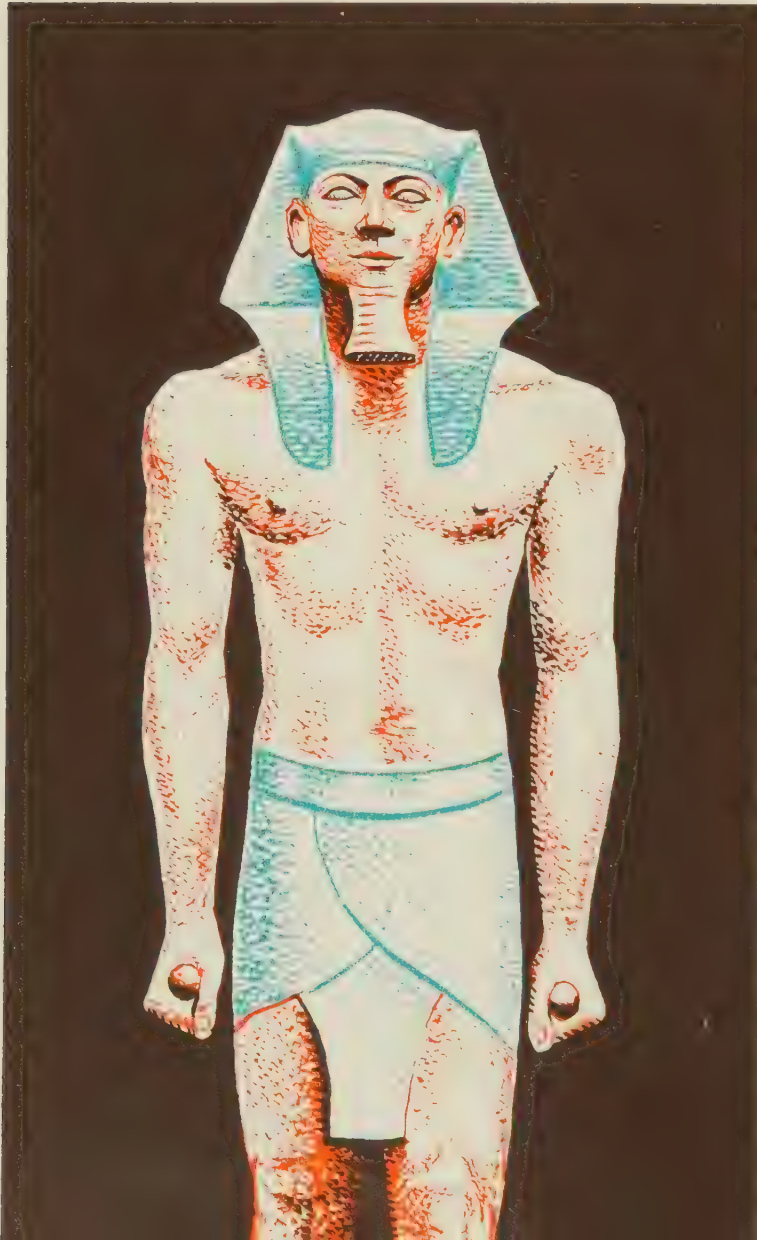


A beautiful wooden statuette of a lady of the New Kingdom.

If we look at statues we will often find that they look life-like except for their stone-blind eyes. The Egyptian sculptor had a very clever way of avoiding this: he inserted eyes of different materials, using a white stone and black obsidian; or making the iris of wood inlaid with rock crystal.

All this might sound more like a craftsman's work than a sculptor's, but that is how the Egyptian artist was regarded. He was not supposed to express himself, to paint a great picture or carve a great statue because he felt inspired, nor did he usually sign his work; he simply had to make the best possible job of what he was doing with the equipment available and the rules laid down for him.

Perhaps it is well for us that he did not use his imagination too much—for if he had we might not have such accurate pictures of Egyptian life.



*Menkaure, the
builder of the third
Pyramid at Giza.*

THE WORK OF THE BUILDERS

PERHAPS we do not like changes very much for some of us feel that things ought to look the way we are used to, even if to-day they are made of different materials. Much of our furniture is covered with plastic sheeting which resembles wood, cloth or leather for, although the manufacturer is no longer using those materials, we have grown accustomed to the appearance of them.

The Egyptians must have felt much the same for they continued to copy the appearance of the old materials long after they had discovered new ones. The earliest Egyptian builders used materials which were easy to obtain—the reeds and papyrus from the river, or the trunks of palm trees.

In PRE-DYNASTIC times the reed or palm leaf roofs of houses were supported by columns made of bundles of reeds or palm trunks tied together. When stone took the place of reeds the old shapes were kept. If a bundle of reeds is stood on end and made to support a weight the tops will splay outwards. The stone columns would have supported a roof just as well if they had been straight but they were made to splay out too and so formed the CAPITAL which is still found on columns to-day.

So closely did the stone masons imitate the shape of the papyrus column that they carved horizontal lines round the top of the shaft to imitate the bands of reeds which originally tied the bundles of papyrus together, and the capital itself was carved to represent the papyrus heads. Other columns, slightly different in detail, had their capitals carved to represent lotus buds or flowers tied together, and even showed the smaller lotus plants which were inserted downwards under the bindings to hold them tight.

In the days of the Old Kingdom and, much later, in the days of the Greek kings, columns which resembled palm trees were erected. The shaft was like the tree's trunk and the upright leaves of the palm were seen in the shape of the CAPITAL. When stone masons first began to copy the shapes of reed or palm columns they did not allow them to stand on their own but joined them on one side to a short wall. There are many of these *engaged* columns in the buildings of King Djoser at Sakkara. In these same temple buildings which surrounded Djoser's Step Pyramid are many other examples of the Egyptians' love of the old materials. The lintels of the doors resemble the split trunks of palm trees; the stone walls are carved in imitation of wooden palisades and there is even an imitation half open door modelled in stone.

Although the Egyptian builders often imitated ancient forms they erected stone columns which were not supposed to look like any other material. The roofs of some early buildings were supported by tall square-sectioned single blocks of stone. By Middle Kingdom days the square column had lost its four corners and had become eight-sided. Later the eight sides became sixteen as the corners were cut off again. Sometimes the sides were hollowed so the column gained a fluted appearance rather like the simple DORIC columns of early Greek architecture—a style which was influenced by the building methods of the Egyptians.

Since columns were much used to support temple roofs it is not surprising that the Egyptians made use of them to show their favourite gods. Some were made in the form of the mummified Osiris and looked like gigantic statues of the god, whilst others were surmounted by the head of the cow goddess Hathor.

The early sun temples, at the time of the Fifth Dynasty, were open to the sky and were built around an OBELISK, the pyramid-shaped top of which was covered with gold,

copper or ELECTRUM which caught the rays of the sun. The triangular peak was believed to be the dwelling place of the sun-god himself, and it may be that early kings built their tombs in the form of a pyramid so that they might join their father, the sun, in a house shaped like his.

Most of the temples which the Egyptians built all through their history, however, are of the same pattern as the royal palace. The king's palace did not have to be a permanent building for the king would not live on earth for ever, but the temple of the god had to endure so it was built of stone instead of bricks and plaster. Even the great temple at KARNAK, although it was enlarged and became more complicated, was built upon the usual pattern. One approached through an avenue of lion-or ram-headed SPHINXES towards the PYLON before which stood two obelisks. The pylon consisted of a double door of pine, overlaid with bronze or gold, between two huge towers covered with carvings and inscriptions. To the face of the towers were fixed long flag poles from which fluttered coloured banners of the king and the gods. Because originally the pylon had been a reed fence, the stonework of their edges was carved to represent bundles of reeds.

Beyond the pylon was the open forecourt, surrounded by a covered colonnade. The crowd were allowed as far as this courtyard but beyond were the regions reserved for the king, the priests, and the god himself. Next came the HYPOSTYLE HALL where a forest of enormous columns were carved and painted with religious scenes and hieroglyphs. The two central rows of columns were taller than their neighbours so that they raised a portion of the roof to form a CLERESTORY which would admit light and air. Beyond the Hypostyle Hall was the sanctuary of the god where lived his statue which was ceremonially bathed, dressed, fed and perfumed every day. Here in the sanctuary it was quite dark for, as one came further into the heart of the temple, the dimmer and more awe-inspiring it became. A worshipper was helped to gain a feeling of reverence by the floor which gently sloped upwards from the entrance, so that he climbed all the while from the brilliance outside, through the dim grandeur of the hall, to the quietness and dark solemnity of the holy of holies.

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We have looked at some of the wonders which the Egyptian builders wrought with stone, either in great MONOLITHIC pillars, or in drums set one above the other to form the huge columns of Karnak, or in great blocks to form the pyramids. Stone lasts longer than other materials so it is easy to gain the impression that nearly all buildings were made of it, but the most common material has been, from earliest times to the present, the humble mud brick.

The mud of the Nile, which is a mixture of clay and sand, is easy to obtain and, along the river banks, Egyptians can be seen to-day making bricks exactly as their ancestors did 6,000 years ago. The mud was dug up and placed in a hole where it was mixed with water and, if necessary, chopped straw or donkey dung to bind and strengthen it. The mixture was then carried in a pot to the brickmaker who filled an oblong wooden mould and turned it out on the ground to dry. When the sun had done its work the bricks were stacked until the builder was ready for them.

Many houses and palaces were built of brick but few have survived. The ancient Egyptians also built the walls of their towns and fortresses of bricks and many of these may still be seen. The kings of old used bricks for their MASTABAS, and brick was used for pyramids during the Middle Kingdom. By New Kingdom days the builders had gained great skill in laying walls which would not break up through movements of the ground or because of



The ruins of the Temple at Luxor are among the most famous and beautiful in Egypt.

shrinking. In order to prevent cracking, mats of reed or loose rushes were laid at regular intervals all along the wall and traces of these can still be seen in many places.

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Wood has never been plentiful in Egypt though there are some native trees such as acacia, tamarisk, willow and date palm. Some of the earliest traders visited Asia Minor and Syria and brought back with them cedar, cypress, fir, juniper, pine and yew. But, as wood was expensive, it was used by builders almost exclusively for the doors and roofs of houses. Craftsmen worked economically and with great skill to make statues, coffins, boxes, furniture and boats.

With wooden boats we come back to the beginning of this chapter and the idea that the Egyptian did not like change. ... The earliest boats were made of bundles of papyrus lashed together and supported in a crescent shape by a rope so that they would not ship water over their ends. Later, when boats were made of wood, the same methods of construction were used. The turned-up end which had been necessary for papyrus boats was continued, although the use of wood should have given the boat-builders greater freedom. A pattern for boat-building had been made which was to last for many years just as a style of architecture was evolved for the future by the use of rushes and reeds. Over the years things may change and grow, but some of them never forget nor hide their humble beginnings. ...

SOME INTERESTING PEOPLE

THE procession went westwards towards the rose-pink cliffs. Thirty-two of the priests of Amun were carrying the gold boat of their god towards his new temple, built for him at Deir el Bahri by Queen Hatshepsut. Their way led up from the Nile for three miles along a road bordered by trees and guarded by brightly painted sphinxes until they came to two long rows of white columns built in terraces against the cliffs. Behind them the rest of the temple was cut in the heart of the living rock.

Up a grand ramp the procession went, across the terrace towards the colonnade of the upper hall. Before each of the great square pillars which formed the front of the colonnades stood a statue of the queen in the form of the god Osiris. The priests, bearing the image of Amun, went on through the hall of columns and into the dark coolness of the sanctuary. Hatshepsut's temple is still impressive but we can only imagine how wonderful it must have been, set as it was against the grandeur of the cliffs; the rows of tall, white columns contrasting with the brightly coloured statues, the painted reliefs and the great bronze doors chased with designs in electrum. To complete the loveliness a garden of incense trees was planted upon the terraces.

The incense trees had come from PUNT because Amun (or rather his priests!) had said that he wanted a garden to "walk abroad in and divert his heart". To sail to Punt was an adventure which might be compared with the voyages of the Elizabethan seamen to the New World. It was considered an achievement great enough to commemorate by a series of painted reliefs inside Amun's temple.

The voyage was planned by Senmut, the genius of his age. He must have been a man of great imagination for, as the architect, he planned a temple daring in its design and unlike any other at that time. Senmut was a favourite at court and, as tutor to the princess, is shown in a statue with her on his knee as he taught. Hatshepsut rewarded his services with gifts and honours, but Senmut seems to have earned the jealousy and dislike of the courtiers for they took their revenge on him after his death by smashing his tomb and cutting out his name wherever it could be found.

The great voyage to Punt was made by five sailing ships, each 60 feet long, which floated down stream with furled sails from Thebes to the Delta. There was no Suez Canal then from the Mediterranean to the Red Sea, but there was a canal, even as long ago as the days of the Middle Kingdom, which was cut through a narrow neck of low-lying land from the Delta to the Red Sea. Through this canal went the ships, and then southwards, down the Gulf of Suez to the Somali Coast and the land of Punt.

Here the voyagers met the king of Punt with his fat, ugly wife and daughter. Bargains were made which, we may be sure, were to the advantage of the Egyptians. The ships were loaded with the living incense trees for Amun, with ebony and ivory, with gold, aromatic woods, and eye cosmetics, with apes and dogs and with panther skins. Some of the natives of Punt went too, either to seek their fortunes in a strange land, or unwillingly as slaves for the royal household.

Back came the ships to Thebes where the treasures were paraded to the astonishment of the Thebans; for "Never was the like of this brought for any king who has been since the beginning". Amun received his incense trees, Hatshepsut luxuries for her court, and Senmut a place of honour at the Queen's feet.

When she had ruled for several years she gave orders that two great obelisks were to be set up to celebrate her jubilee. Senmut was, of course, chosen to procure the stone and erect

Queen Hatshepsut's minister takes leave of the King and Queen of Punt while cargo is taken aboard the Egyptian ships.



the obelisks. It took about seven months for the stone to be quarried, for each of these shafts was 97 feet long and weighed 323 tons. A huge barge had to be built to carry the stones, when the river was in flood, from the granite quarries in Aswan to Thebes. The obelisks were set up before the entrance to the temple at Karnak but we do not know for certain how they managed to stand on end a pillar of stone, twice as heavy and one and a half times as long as the average railway locomotive. Probably the obelisk was dragged up a slope and allowed to slide forward over the curved wall of a funnel filled with sand until it reached a prepared position. Then the sand would be cleared away and the obelisk pulled upright. When it was in position the stone masons and sculptors would take over to polish and carve it with inscriptions chosen by the queen.

Hatshepsut was justly proud of her obelisks for the base of one of them is covered with an inscription describing how the work was carried out. In it she claims that the work was finished in about eight months which is probably not very far from the truth for she was a powerful queen who would see that her orders were carried out efficiently and quickly. She did not intend that anyone should have any doubt of her ability for she adds, after her account of the work, "Let not him who hears this say that what I have said is a lie, but rather let him say 'How like her it is!'"

Although Hatshepsut had taken upon herself the power and dignity of a king she had been appointed merely as a regent for her nephew, the young Tuthmosis III. This boy had grown up in Hatshepsut's palace, married to her daughter, and kept in the background whilst his aunt took more and more power into her own hands. Tuthmosis was an energetic and ambitious youth and he grew up to resent this treatment and to hate Hatshepsut. When, after 21 years, his aunt died and he gained full control he viciously destroyed her statues and covered over or cut out her name wherever it appeared.

Perhaps because he had been denied power when he was young he set out to show his might once he became king. The empire had been neglected and was in revolt. In no less than 16 expeditions into Asia he quelled rebellious chieftains and extended the empire to include Syria and Palestine. His most famous battle was fought at Megiddo when, in a splendid chariot of electrum, he led the charge of his army through a narrow gap in the mountains and across the open plain of Esdraelon. The story of this battle is inscribed upon the walls of the temple at Karnak.

For this temple Tuthmosis himself designed some golden vessels and he supervised the building of many other beautiful temples. Although away from his country for many months together he did not neglect it but spent much of his time visiting and controlling the centres of government in his kingdom. His chief minister said of him: "Lo his majesty knew what happened ... he was Thoth in everything." He proclaimed his great deeds but was careful not to exaggerate; indeed he did not have to for he was the greatest ruler and most powerful soldier of his age. His mummy and statue have both survived and they help to give an idea of the type of man he was.

Much of the empire of Tuthmosis III was lost under Amenhotpe III, the lover of pleasure, and Akhenaton, the religious reformer; but Seti I, a king of the Nineteenth Dynasty, fought campaigns to recover the lost territories. Seti is the king to whom we owe a great deal of our knowledge of ancient Egypt for, in his temple at Abydos, is a long list of the kings stretching back to Menes. The walls and ceiling in his tomb in the Valley of the Kings are covered with paintings of the king's journey through the Underworld. It is the largest tomb ever excavated for it descends into the cliffs for 470 feet.



The entrance to Ramesses II's great temple at Abu Simbel.

The son of Seti was Ramesses II who is known as 'The Great' for, unlike Tuthmosis, he did exaggerate. He was nevertheless a 'record breaker' in many ways. His monuments which speak loudly of his greatness, are bigger and more numerous than those of any other Pharaoh. Not content with his own achievements he sometimes wiped out the names of other pharaohs and inserted his own.

He reigned for 67 years, died at the age of 86, had at least 7 queens and was the father of at least 79 sons and 31 daughters! His buildings were immense and include the great Hypostyle Hall in the temple at Karnak. At Abu Simbel in Nubia he built two temples cut into the heart of the granite rocks. Each side of the entrance two huge seated figures of himself, 65 feet in height, gaze down upon the Nile. Despite his love of publicity and his boasting he was not as great a figure as he would have liked us to believe. He earned his title 'The Great' because the early students of Egyptology were always coming across his name and they then knew little of the achievements of other pharaohs.

The eldest son of the long lived Ramesses II died before he had a chance to come to the throne. Unlike his father, this man Khaemwese was modest and quiet yet he deserves mention for being another 'first' in history. He was probably the earliest archaeologist for he studied and repaired the monuments of olden times—and it must be remembered that the days of the Old Kingdom were as far from him as the Romans are from us! Tales often grow up about unusual people and Khaemwese later became the central figure of a folk tale—probably because he had an enquiring and inventive mind and was able to do things which onlookers could only explain by saying that he was a magician.

This chapter began with the story of a woman who loved power and who made herself the pharaoh of a land which was soon to be a large empire. We will end with another woman, some 300 years later, who tried to make her son the king of an Egypt which was growing weaker and which would never again see the greatness of such rulers as Hatshepsut or Tuthmosis.

All but one of the kings of the Twentieth Dynasty bear the name of the king who let everyone know that he was 'the Great'. There were eleven Ramesses altogether, but the last eight were weak kings and it is with the third of that name that this story deals. In the harem of Ramesses III was a queen Tiy who wished to see her own son on the throne and plotted with the clerk and inspectors of the royal harem to assassinate the king. The plot grew in size until it involved besides Queen Tiy and her son, two treasury officials, a commander of the army, a captain of archers, a priest, five butlers and altogether about 24 palace officials including six women. All was ready for the blow to be struck when the king's loyal followers heard of the plot. The old king had good reason to act harshly yet he ordered that the conspirators should be given a fair trial conducted by twelve judges chosen by him. Those who were found guilty would be expected to commit suicide.

Even though their case appeared hopeless some of the women conspirators, aided by a captain of police and an infantry officer, bribed their gaolers to let them out of prison and they visited two of the judges. There they feasted and drank with them, and the women tried by their charms to cause the judges to be favourable in their verdict.

This plot was discovered and the foolish judges were sentenced to have their ears and noses cut off whilst a third was 'dismissed with a caution'. The trial continued and all the plotters, including the young prince, were convicted and allowed to take their own lives. Queen Tiy herself does not appear in the record of the trial and her punishment is unknown but it is likely that the king himself judged her case. Ramesses was so shaken and distressed by these events that they probably hastened his end for, before the trial of his intended assassins was over, he was dead.

THE GREAT DISCOVERY

ACROSS the river from the city of Thebes, hidden in the western desert, is the rocky VALLEY OF THE KINGS. Here the NEW KINGDOM pharaohs made their tombs, for these kings had not built pyramids as their last resting places, but had chosen to be laid in great tombs cut deep into the surrounding cliffs.

A valley lined with royal tombs was an excellent place for archaeologists to dig and by the year 1922 the tombs of nearly all the main pharaohs had been found, although ransacked in ancient times by cunning tomb robbers. Most archaeologists were convinced that there was nothing else to find, but Dr Howard Carter was more persistent. He believed that somewhere in the valley was the undiscovered tomb of Tutankhamun, a king of the Eighteenth Dynasty. Although he had been disappointed in his search he decided on one more excavation. The Twentieth Dynasty workmen who had been employed to dig the huge tomb of Ramesses VI, had unwittingly built their huts and dumped their rubbish so as to conceal the entrance to Tutankhamun's tomb. Howard Carter decided to remove the huts and dig beneath them. His plan was successful for the material which he removed had kept for over 3,000 years a secret which he was now to reveal.

First some steps came to light, then a sealed door, a passage and another door. A hole was cut in this second door and by the light of a torch Howard Carter saw the glint of gold and was able to pick out shapes of strange animals, statues, weapons and furniture.

The door was carefully broken down and the excavators entered a small room to find at their feet a beautiful alabaster cup with lotus flower handles. In front of them were three couches carved in the shape of long bodied animals. All around were stacked chairs, beds and stools, ornate alabaster jars and gilded inlaid caskets; to the left they saw four chariots,

The discovery of Tutankhamun's tomb. The sealed burial chamber contained the Pharaoh's mummy which had lain undisturbed for over 3,000 years.





The gold mask which covered the head of Tutankhamun's mummy.

Griffith Institute.

dismantled and broken so that they might pass through the narrow door. The harness was there too, but it presented a difficult task to those who tried to move it. The leather had turned into a black, sticky substance and only the gold leaf which had covered the leather remained to show what the position of the various straps had been, but this was enough for a reconstruction to be made. A painted wooden casket, one of the greatest artistic treasures ever to come out of Egypt, was decorated with minutely detailed hunting and battle scenes in brilliant colours. Inside it were three pairs of rush sandals and two royal robes, trimmed with beads, sequins and rosettes. So that these fragile things could be handled and preserved in the outside air, each object was sprayed with a preservative.

A magnificent throne had winged serpents for arms, and lions' heads at the tops of its legs. It was decorated with gold, FAIENCE and coloured stones to form a picture of the king being anointed by his queen—the sort of picture with natural, relaxed figures, which one of the artists of Akhenaton's court would have painted.

To the right of the first room was another sealed doorway—the entrance to the burial chamber itself. Facing one another on each side of the doorway, like sentinels guarding the entrance to a palace, stood life-sized statues of the king. These guardians of the king's body held a staff and a mace which were covered with gold as were their head-dresses and garments.

Howard Carter was anxious to break down the door so that he might see the mummy which the silent sentinels had been guarding. Permission to do so, however, had to be won from the Egyptian authorities, for this was a king's tomb which they wished to enter and there were many who regarded it as irreverent to disturb his rest.

Soon the newspapers of the world had heard of the tomb, and King 'Tut' as he was nicknamed became the 'personality of the year'. Reporters as well as archaeologists and sightseers hung around the once lonely valley and begged to be allowed to see the treasure. The public imagination was caught and, whilst some designed fashionable clothes based upon the styles of 3,000 years ago, others wrote letters to the newspapers threatening those who annoyed King 'Tut' with the 'Pharaoh's Curse'. Lord Carnarvon, who paid the expenses of the excavation, had been a sick man for years but when, soon after the discovery he died because of a mosquito bite, many people declared that the curse was working.

The burial chamber was opened on 17th February, 1923 in the presence of about 20 important people. Excitement was high in the hot, small tomb as, piece by piece, the doorway was broken down, and a large wooden shrine covered with gold and inlaid with panels of blue FAIENCE was revealed which entirely filled the room. Three more shrines were inside the first, and inside the fourth was a great SARCOPHAGUS of carved yellow quartzite. Then came three coffins each in the shape of a mummy of the dead king. On the forehead of the first was placed a wreath of cornflowers, lily petals and olive leaves. The first two coffins were made of wood covered with gold and inlaid with coloured glass, but the third was made of 242 lbs. of solid gold inlaid with semi-precious stones and FAIENCE.

Finally, within these many coverings, lay the mummy itself. Its head was covered with a life-sized portrait mask of gold inlaid with LAPIS-LAZULI. The eyes, also inlaid, gave it a realistic appearance and showed how handsome the young king must have been.

Although the whole tomb had been filled with treasures, the things which the young king valued most highly were placed in the innermost coffin with him. There were two magnificent daggers, one of gold, and one of iron embellished with a hilt of gold and a knob of crystal. Iron was a very rare metal in Egypt at this time and the dagger may have been the greatly valued gift of some foreign prince.

The king's mummy was wrapped in linen bandages over which had been poured resin which had set and hardened into a black substance. Each of the pharaoh's fingers and toes was encased in a gold sheath; round his neck was a necklace and a gold wire from which hung a black resin SCARAB. All over the mummy—even between the various layers of the linen wrappings—were many jewels and AMULETS in the form of rings, bracelets and necklaces which it was hoped would protect the king on his journey through the Underworld.

Beyond the burial chamber was another room where stood a group of wooden shrines and chests containing gilded statuettes of the king. In the centre stood a magnificent shrine, overlaid with gold and bearing figures of beautiful goddesses who were there to protect the alabaster CANOPIC CHEST which lay within. Inside this were four miniature coffins which contained the king's internal organs. A black statue of Anubis, the jackal god and protector of the dead, guarded the entrance to this sacred room.

There is a fourth room which leads out of the entrance chamber. Some little while after the burial thieves managed to break into the tomb and they ransacked this little room. Fortunately for us they must have been surprised whilst turning things over in the search



A jewelled pectoral from the tomb of Tutankhamun.



for valuables, for an attempt had been made to clear up the muddle by cramming things regardless of their shape and size into any box which came to hand. The muddled state of the tomb made the task of the excavators very difficult. They spent ten years in removing, preserving, sorting, cataloguing and photographing the treasures before removing them to the Cairo museum.

Among the objects which have come to us from Tutankhamun's tomb are two trumpets—one of silver and one of copper. It is not known quite how the Egyptians played them for no mouthpiece has been found, but they have been broadcast by a modern trumpeter who played them with a modern mouthpiece.

This, the only royal tomb which has ever been found intact, taught the Egyptologists a great deal about Egyptian burial customs and showed many of the articles of their everyday life. Those who have seen Tutankhamun's treasures have wondered how rich must have been the treasures of wealthier pharaohs in Egypt's greatest days, for when Tutankhamun was king the power and wealth of Egypt was starting to decline. The young king had but a short reign in a court which was split by religious quarrels, and soon after he came to the throne worship of the ATON finally ceased and the old god AMUN came into his own again. Tutankhamun cannot be called an important king, but in fact he is far more interesting to those who live 3,000 years after him than he was to the people of his own day.

A NOBLEMAN'S DAY

A FEW moments ago it had been quiet and still in the garden. Now, as the sun rose and the reflections of the acacias and sycamores could be seen in the lily pool, the red and green-headed ducks swam out from behind the papyrus boats where they had spent the night and began a noisy search for food. The fish swam deeper and hid under the water lilies or



Nebamun visits his estate to inspect the harvest.

between the stones which lined the pool ... Nebamun's estate seemed to come to life again. A gardener walked down one of the many straight paths, examining the pomegranates and fig trees and picking some of the grapes from the climbing vines for the family to eat. In another part of the garden work began with the shadûf and again the water sparkled in the irrigation channels between the beds of radishes, onions and beans.

The butler, Nebamun's most trusted servant, a man of great importance, now began his rounds. The master was giving a party this afternoon and much had to be done to make ready for it. The gardeners had to bring vegetables, wine jars had to be opened, the kitchen servants were given their orders concerning the amount of beef and the number of ducks and pigeons they were to cook in the ovens. The bakers began to knead the dough and to blend the honey-sweetened mixtures with which the favourite cakes were made. Then the bread and meat and beer had to be prepared for Nebamun's breakfast, and his barber, manicurist and chiropodist called to attend to him when he rose.

The bedrooms of the family were at the back of the single-storey mud-brick house. Nebamun's wife, Meryt, and the other womenfolk had self-contained apartments which only the master was allowed to enter. The bed on which Nebamun slept had a wooden framework and a footboard which was decorated with carved figures of the favourite household god, Bes, and picked out in gold leaf. He had a mattress of linen mesh and a headrest of carved ivory.

When the master woke he called for his servants, rose and went to his bathroom where he washed in water which a servant poured over him. His attendants then came with their curved metal razors, tweezers, knives and files in ebony boxes. Having been shaved and massaged with perfumed ointments he put on his clean white linen loincloth, short tunic and palm fibre sandals. For ornament he wore bracelets, rings and a broad collar of brightly



Meryt gets ready for the party.

coloured glass and stone beads arranged in patterns.

Meryt took rather longer over her preparations for she had to have her hair dressed into tiny curls and plaits. She then sat at her make-up box and took from its various compartments the little pots containing lotions for her skin, green malachite eye shadow, henna for her nails and paint for her lips. With a stick of KOHL she underlined her lovely almond-shaped eyes and painted her eyebrows. While she was admiring the results of her work in a bronze mirror with its ebony handle carved in the shape of a papyrus stem, her serving-maids brought in her breakfast. Nebamun had eaten alone and gone out early for he had much to do inspecting his estates before meeting his guests in the beautiful hall of his house.

He drove himself in a light chariot with his servants running behind him carrying his sandals, his wand of office and food for the midday meal. First he visited the fields where the harvest was being cut and, surrounded by his scribes who made notes of the yield of the corn, he sat beneath a tree to watch the reapers at work with their flint-toothed wooden sickles. Women followed, gathered up the corn into baskets and emptied them into a big network bag. Nebamun wandered across the field to the threshing floor where patient oxen walked round and round treading out the grain. Standing out of the way he watched the men winnowing the corn by throwing it into the air so that the wind would carry away the chaff.

From the cornfields Nebamun went to see his vineyards and watched while the juice was pressed out of the grapes by the bare feet of men trampling in the vat whilst they held on to loops of rope which hung from a beam above them. Later the wine would be stored in large narrow-necked stone jars, pointed at the base and sealed with stone stoppers. Nebamun

would be there when the wine was bottled, to seal each jar with his SCARAB ring whilst the scribes wrote on the jar the name of the vineyard and the year of vintage.

But the wine was not ready yet, nor had Nebamun time to stay, He was a busy man who, besides his own estates, had to supervise the workshops in the temple of Amon-Rē at Thebes. To-day he made a tour of inspection to see what progress the craftsmen were making with the statues and jewellery which the king intended to present to the god at the New Year celebrations. He saw the sculptors, the carpenters making furniture and chariots, the leather workers beating oil-impregnated skins to make them supple and strong, and jewellers drilling turquoise and amethyst and other stones to make beads.

The glaziers were making vases with bands of different coloured glass which they wound round a core of sand and pulled into patterns with metal tools. These New Kingdom craftsmen had great skill but did not know how to blow glass to make cups and vases as glaziers did later in the days of the Romans. The last task of the day was to see that the gold which had been brought from the temple treasury was properly weighed before being handed over to the goldsmiths. Nebamun counted a pile of gold rings which were balanced in a scale against weights shaped like crouching oxen.

At last Nebamun felt free to go home so once more he mounted his chariot and, followed by his running servants, sped back to his lovely walled villa. There he had another bath, a massage and a rest before changing into his dress of finely pleated linen, with its flowing sleeves and long flared skirt. Over his close cropped hair he wore a formal tightly curled wig and on his chest a beautifully jewelled pectoral.

When he was ready he joined his wife, Meryt, and her parents in the reception hall of the house. It was a long, spacious room, the roof gaily decorated with geometric designs and supported by painted wooden columns. The light entered through painted stone grille windows and showed up the bright colours of the walls. The living room which opened out of the hall had a ceiling supported by four graceful painted columns with carved lotus capitals. A clerestory roof allowed slanting rays of sunshine to enter and light up the walls—brilliantly painted with ducks and flowers. Even the floor was painted to resemble a pond surrounded by reeds and full of birds and fish! The Egyptian nobleman's home was always bright and colourful, but on this day the rooms were given an added gaiety by the flowers and bowls of fruit which were placed about the room. Low tables laden with figs, dates and grapes; sweet cakes and roasted duck or pigeon, stood about the room within easy reach of the guests.

As they arrived the guests were greeted with flowery compliments and taken to a platform to wash their hands in water kept in a large stone jar. Important guests were allowed to sit with Nebamun and Meryt on richly ornamented chairs on a raised platform. The rest were given low chairs or stools ranged on either side of the room.

Young serving-maids and men went round presenting the guests with garlands of flowers and cups of wine. As everyone helped himself and ate with his fingers, the services of another attendant who brought an alabaster bowl of water and a linen towel were greatly appreciated. For their greater comfort another servant girl went round and placed a lump of scented grease upon the tops of the guests' heads. In the heat this melted and trickled down to refresh their faces and bodies, though it also spoiled the appearance of their clean white dresses.

The party was going well; all the guests were chattering happily and the wine was so good and plentiful that soon some were rather drunk. No one thought it ill-mannered if a guest was sick but an attendant rushed forward with a bowl or cleared up the mess and the party continued.



The Egyptians were fond of gaiety, and musicians entertained the guests at lavish feasts.

An orchestra of men and women playing on harps, lutes, lyres and flutes came in. Young girls, dressed in scanty costume, wove amongst the guests in slow, rhythmic movements to the accompaniment of the orchestra and the clapping of hands. Between dances the men and women sang whilst they played on the lute or harp.

Nebamun's party went on until it was quite late and, when it grew dark, the lamps were brought in. Little earthenware dishes, resting on carved wooden stands shaped like papyrus branches, were filled with oil, and wicks of twisted linen strands were lit from a charcoal fire. Lovely alabaster lamps showed their painted designs when they were lit and a couple of these glowed softly on the platform where Nebamun sat surveying his feast. ...

It had been a good party; all had "celebrated a happy day and taken no rest". The dancers had finished, the wine had been drunk and the effects of it showed on the guests. Noisily the party broke up and those who could not walk were carried by their servants who waited outside with litters and chariots.

Meryt's attendants came at her call and helped her to bed; Nebamun gave his last instructions to his butler and went to his room. The servants tidied the hall and removed the scraps of food. A busy and exciting day had ended for the family of Nebamun. ... Not all days were like this however, for Nebamun often enjoyed taking his bow or a lasso and his well-trained greyhounds to hunt antelopes or gazelles. One of his proudest memories was of a lion-hunt in which he had joined as the guest of the king.

Another day Nebamun would hunt ducks in the marshes accompanied by his wife and daughter and pet cat. In a papyrus boat they would glide amongst the reeds. When his wife

suddenly clapped her hands the ducks would rise so that Nebamun could bring them down with his curved throwing sticks. The cat acted as a retriever dog would for a modern hunter for it would jump into the reeds or the water to bring back the fallen birds.

The Egyptians were fond of their pets and often had pictures of them in their tombs. When Nebamun and Meryt were not entertaining they were happy to spend the evening quietly with their children and pets. The cat and a tame monkey were fed with titbits from the supper table and were allowed to climb upon their master's knee. A goose too had the freedom of the house and would often be found sitting peacefully with the cat under Nebamun's chair.

On this evening of the party as the tired family went to sleep they thought of the pleasures of a quiet evening at home. Meryt and Nebamun promised each other to get out the pieces with the carved lion heads and play a game like our chess or draughts. Their son thought of wrestling and leap-frog and decided to challenge his sister to a game of ninepins. There were other games he could have played—games which Egyptologists have named 'Serpent' and 'Hounds and Jackals' but, although the boards and pieces have been found in tombs, the rules are not known to us.

Egyptian children seem to have enjoyed many of the games which children enjoy to-day and, as Meryt looked in on her sleeping daughter, she saw that she was lying as little girls still do with her favourite wooden doll to keep her company.

Such a life of pleasure and luxury was enjoyed by the nobleman and the priests although they had responsible work to do as well; but there were thousands of ordinary folk whose lives were simple and laborious, and no tomb paintings or papyri remain to tell us of their homes or daily lives. What you have read of kings or nobles, of voyages and discoveries comes from the records which the Egyptians themselves have left, so let us finish this story of ancient Egypt with the words used by the scribes at the end of the tales which they copied out on papyrus:

"It (the book) has come from its beginning to its end in accordance with what has been found in writing."



GLOSSARY AND INDEX

A List of words which are to be found in the book together with their meanings.

AMULET.	A charm worn as a protection against evil or to strengthen the body	38, 55
AMUN.	The local god of Thebes who, during the NEW KINGDOM, became chief of all the Egyptian gods	 56
ANATOMY.	The study of the way the body is made	 38
ARCHAEOLOGIST.	One who studies the past and digs to find the remains of ancient civilizations	 3, 7
ASTRONOMER.	A scientist who studies the stars and outer space	... 6, 8, 12
ATON.	The sun's disk which was worshipped as God	... 32, 41, 56
BOOK OF THE DEAD.	A collection of prayers and spells designed to help the KA on its journey after death	 20, 41
CANOPIC CHEST.	The chest which held the CANOPIC JARS	 55
CANOPIC JARS	contained the internal organs of a mummified person. So called by the Greeks because they reminded them of Canopus who was worshipped as a human-headed pot	 36
CAPITAL.	The top part of a column	 45
CARTOUCHE.	An oval shape  which enclosed the names of kings. A French word meaning 'ring'	 30
CATARACT.	A stretch of the Nile where it flows between rocky hills, boulders and islands. There are 6 Cataracts between Aswan and Khartoum. The Second Cataract at Wadi Halfa is the boundary between Egypt and Nubia	 23
CLERESTORY.	A row of windows which stand above the rest of the building like those which illuminate the central aisle of a church	 46
COPTIC.	The language of the COPTS	 29
COPTS.	Members of the Christian Church in Egypt	 29
CRETE.	An island in the Mediterranean Sea—once the scene of the great Minoan civilization...	 22, 24
CUBIT.	A measure of length—the distance from the tip of the middle finger to the elbow—about 20½ inches	 35
DELTA.	The shape of the Greek letter  (delta) is rather like the fan shape of the many-branched mouth of the Nile	 6, 7
DEMOTIC.	A form of writing developed from HIERATIC	 29
DETERMINATIVE.	A sign added to an Egyptian word to illustrate its meaning	... 29
DORIC.	The earliest form of Greek architecture	 45
DYNASTY.	A line or family of kings	 11
EGYPTOLOGIST.	A scholar who specializes in the study of ancient Egypt	10, 31
ELECTRUM.	An alloy of silver and gold	 46
FAIENCE.	Powdered quartz coated with glaze—used for making jewellery, amulets, vases, SHAWABTIS, etc.	 54, 55
FERTILE CRESCENT.	A curve of fertile land stretching from Palestine, through Syria, to Iraq	 16
FEUDAL.	A system of holding lands in return for service to the king	 23

FIRST CATARACT is at Aswan—now the site of a great dam	...	...	6, 23
HERODOTUS. A Greek who lived from 484 to 424 B.C. He wrote about history and geography	...	...	36
HIERATIC. A simplified form of the HIEROGLYPHIC script as written on PAPYRUS	...	...	11, 29
HIEROGLYPH. A picture sign	...	...	28
HIEROGLYPHIC from Greek word meaning 'sacred carving'—ancient Egyptian picture writing	...	...	16, 29
HORUS. A falcon god of Egypt and son of Osiris	...	...	16, 39
HORUS NAME. A name which the king took to show that he was under the protection of Horus, and the son of Osiris	...	...	16
HYKSOS. A tribe from Syria which invaded Egypt about 1730 B.C.	...	...	25
HYPOSTYLE. Having the roof supported on pillars	...	...	46
IBIS. A wading bird with a long, curved beak...	...	...	40
IRRIGATION. Watering the land artificially	...	...	6, 8, 23, 24
ISOSCELES. A triangle having two equal sides	...	...	19
KA. A man's personality or life force	...	...	13
KARNAK. The name of a modern village on the site of Thebes where are the ruins of the temple of Amon-Rē (AMUN). It is the largest in the world: 1170 feet in length, 370 feet wide at its broadest part. Begun in the MIDDLE KINGDOM it was added to by succeeding Pharaohs. Its HYPOSTYLE hall is famous. An avenue of SPHINXES leads to the temple of AMUN at Luxor	...	...	46
KLEOPATRA (English: Cleopatra). A queen of Egypt. 'Cleopatra's Needle', which stands on the Thames Embankment, is an OBELISK 68½ feet high weighing 187 tons. It belonged to King Tuthmosis III and was brought to London in 1877	...	...	30
KOHL. A paste or powder used as an eye-paint	...	...	58
LABYRINTH. A maze of many passages and rooms	...	...	24, 40
LAPIS LAZULI. A semi-precious stone, rich blue in colour	...	...	31, 55
MALACHITE. A copper ore, green in colour...	...	...	38
MASTABA. A tomb which resembles a bench. <i>Mastaba</i> is Arabic for 'bench'	...	...	16, 46
MESOPOTAMIA. The land of the two rivers—present day Iraq	...	...	5, 6
MIDDLE KINGDOM. Period of Egyptian history covering the Eleventh and Twelfth Dynasties	...	...	22, 23
MONOLITHIC. Consisting of a single block of stone	...	...	46
MUMMIFICATION. The process of preserving dead bodies	...	...	16
MUMMY. A preserved corpse	...	...	14, 36
NECROPOLIS. City of the dead or cemetery	...	...	14
NEW KINGDOM. Period of Egyptian history from the Eighteenth to Twentieth Dynasties	...	...	25, 52
NOME. A district of Egypt governed by a <i>nomarch</i> who held his lands by favour of the king	...	...	22, 39
OBELISK. A tall, tapering four-sided column made from a single block of stone, the tip being shaped like a pyramid. 'Cleopatra's Needle' is an obelisk. Others from ancient Egypt are in Paris, Rome and New York	...	...	30, 45
OLD KINGDOM. Period of Egyptian history from Third to Sixth Dynasties	...	...	20, 23, 39

OSTRACA.	Broken fragments of pottery and limestone upon which the Egyptians often wrote	 31
PALETTE.	A tablet or flat dish usually of slate, used for mixing cosmetics	 16
PAPYRUS (plural PAPYRI).	The Greek word is <i>papyros</i> from which we get our word 'paper'. We use the word PAPYRUS to mean a type of reed, the writing material the ancient Egyptians made from it, or an ancient Egyptian document	 8, 11, 20
PHARAOH.	Egyptian word meaning 'the Great House'—an epithet given to Egyptian kings from Tuthmosis III onwards	 26
PREDYNASTIC.	The period of Egyptian civilization before the First Dynasty and before there were any written records	 45
PTOLEMAIOS (English: Ptolemy).	The name borne by the Dynasty of Greek kings following Alexander the Great (323–30 B.C.)	 30
PUNT.	A land to the south of the Red Sea—probably near Somaliland	 22, 48
PYLON.	The great gateway to an Egyptian temple	 46
PYRAMID.	An ancient Egyptian tomb built of stone or mud brick with a square base and triangular sides	 5, 18
RADIO-ACTIVE CARBON or 'Carbon 14'	exists in all living substances but begins to disappear at a known rate when the substance dies	 12
RĒ the sun-god.	'Rē' is pronounced to rhyme with 'ray'	 14
RHIND PAPYRUS.	An Egyptian mathematical document (about 1650 B.C.) named after its discoverer, Alexander Rhind	 35
SARCOPHAGUS.	An outer stone coffin containing one or more coffins	 20, 55
SCARAB.	A seal made of many materials in the form of a scarabaeus beetle, worn as a signet ring or round the neck, and inscribed with the owner's name. Also a symbol of life and rebirth, and worn as an AMULET. Large <i>Heart Scarabs</i> were placed over the hearts of mummies	 55, 59
SERDAB.	A small, completely enclosed room which contained the tomb statue	 18
SEVEN WONDERS of the Ancient World were:	the Pyramids of Egypt, the Hanging Gardens of Babylon, the Colossus of Rhodes, the Pharos (Lighthouse) at Alexandria, the Statue of Zeus at Olympia, the Mausoleum at Halicarnassus, the Temple of Diana at Ephesus	 18
SHAWABTIS.	Small statuettes which were placed in tombs to relieve the dead man of any tasks which he might be called upon to perform	 43
SINAI.	A desert peninsula to the east of Egypt	 22
SOTHIS.	Greek name for Sirius, the Dog Star	 12
SPHINX.	A statue with a lion's body and the head of a man or ram	 20, 46
STELA (plural STELAE).	An inscribed slab of stone	 10, 31
STRABO.	A Greek geographer who lived from 63 B.C. to A.D. 19	 24
THOTH.	IBIS-headed god of wisdom and letters—patron of scribes	 12
TRIBUTARY.	A stream which feeds a river	 6
VALLEY OF THE KINGS	was in the western desert, opposite Thebes, where the kings of the NEW KINGDOM were buried	 26, 32, 52

VI

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YEARS B.C.	AGE	DYNASTIES	EGYPTIAN NAME	GREEK NAME	OTHER EVENTS
2423 2563			A TIME OF REVOLUTION		Expedition to Nubia
	OLD KINGDOM	6 5			
2723 2778		4 3	Unas Menkaure Khaefre Khufu Snefru Djoser	(Mycerinus) (Chephren) (Cheops)	Sun Temples The Wise Man Ptahotep The Great Pyramids
3000		1	Narmer—Menes		Step Pyramid Union of the Two Lands
	PRE-DYNASTIC		CHIEF KINGS MENTIONED		Papyrus used for Writing
4000 4241					First Calendar 4241 p
					OTHER EVENTS

TIME CHART, showing chief dates, dynasties, King



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